Pioneer

SPARE PARTS MASTER

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

音響／錄像多頻道接收器

VSX-D409
VSX-D409-G
VSX-D509S
VSX-D509S-G

Operating Instructions

操作說明書

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However the method of connecting and operating the unit is the same.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

THE STANDBY/ON BUTTON IS SECONDARY CONNECTED AND THEREFORE DOES NOT SEPARATE THE UNIT FROM MAINS POWER IN STANDBY POSITION.

VENTILATION

- When installing this unit, make sure to leave space around the unit for ventilation to improve heat radiation (at least 20 cm at top, 15 cm at rear, and 15 cm at each side). If not enough space is provided between the unit and walls or other equipment, heat will build up inside, interfering with performance or causing malfunctions.
- Do not place on a thick carpet, bed, sofa, or fabric having a thck pile. Do not cover with fabric or covering. Anything that blocks ventilation will cause intenal tempture to rise, which may lead to breakdown or fire hazard.

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

IMPORTANT

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.

– Increase the separation between the equipment and receiver.

– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

– Consult the dealer or an experienced radio/TV technician for help.

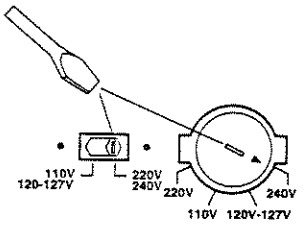
TWO VOLTAGE SELECTOR SWITCHES (multi-voltage model only)

Only multi-voltage model is provided with these switches. Mains voltages in Saudi Arabia are 127 V and 220 V only. Never use this model with the 110 V setting in Saudi Arabia.

The line voltage selector switches are on the rear panel. Check that they are set properly before plugging the power cord into the household wall socket. If the voltage is not properly set or if you move to an area where the voltage requirements differ, adjust the selector switches as follows.

1. Use a medium-size screwdriver.
2. First, insert the screwdriver in the groove of the voltage selector at the right, and adjust so that the tip of the groove points to the voltage value of your area.
3. Next, insert the screwdriver in the groove of the voltage selector at the left and adjust until the voltage is the same as at the right.

Medium-size screwdriver



TWO VOLTAGE SELECTORS

Table of Contents

Features 4

Introductory Information 5
- Checking the Supplied Accessories 5
- Using this Manual 5
- Installing the Receiver 5
- When Making Cable Connections 5
- Preparing the Remote Control 5
- Channel Step Setting 6
- 7

Connecting Your Equipment 8
- Connecting Audio Components 8
- Connecting Video Components 9
- Connecting Digital Components 10
- Connecting DVD 5.1 Channel Components 11
- Connecting Antennas 12
- Connecting Speakers 13

Preparations 15
- Setting Up for Surround Sound 15
- Setting the Volume Level of Each Channel 21
- Setting Up the Remote Control 22
- Clearing One of the Remote Control Settings (VSX-D509S/D509S-G) 26
- Clearing All the Remote Control Settings 26
- Direct Function 27
- Programming a Different Component into the MULTI CONTROL button (VSX-D509S/D509S-G) 28
- Checking Preset Code (VSX-D509S/D509S-G) 28

Displays & Controls 29
- Front Panel 29
- Remote Control (VSX-D509S/D509S-G) 30
- Remote Control (VSX-D409/D409-G) 32
- Display 34

Sound Modes 35
- Learning about the Sound Modes 35
- Switching ANALOG/DIGITAL Signal Input 36
- Playing Sources with Dolby Digital or DTS Sound 37
- Selecting a Sound Mode 38
- Using in MIDNIGHT Listening Mode 39
- ADVANCED THEATER mode (Dolby/DTS mode) 40
- Playing a Source 40

Using the Tuner 41
- Finding a Station 41
- Tuning Directly to a Station 42
- Memorizing Stations 42
- Recalling Memorized Stations 43

Making a Recording 44
- Making an Audio or a Video Recording 44

Controlling the Rest of Your System 45
- CD/MD/CD-R/VCR/LD Player Controls 45
- Cassette Deck Controls 46
- DVD/DVR Player Controls 47
- DTV Controls 48
- Cable TV/Satellite TV/TV Controls 49

Additional Information 50
- Troubleshooting 50
- Specifications 52

Preset Code List (at the end of this manual)
- Preset Code List (VSX-D509S/D509S-G) i
- Preset Code List (VSX-D409/D409-G) v

DTS* (Digital Theater Systems) decoder equipped

DTS is a digital sound system introduced in theaters. Playback of DVD, LD, and CD recorded in DTS audio creates the environment of a theater or the sensation of a concert hall in your home.

Dolby** Digital and Dolby Pro Logic

No need to worry about program formats! When playing Dolby Digital or Dolby Surround software in the DD (Dolby) Surround mode, decoding switches automatically according to the input signal. All you have to do is sit back and enjoy! (When connecting a DVD/LD player or LD player using the DD RF output, a commercially available RF demodulator (RFD-1) is required.)

ADVANCED THEATER modes

Four sound modes that enhance DTS and Dolby Surround performance by simulating the environment of a movie theater (DRAMA, ACTION), or the ambience of a concert hall (MUSICAL). With EXPANDED THEATER, you can enjoy Dolby Surround encoded software in simulated Dolby Digital.

Various Surround Effects (DSP)

The DSP (Digital Signal Processing) surround mode allows you to transform your living room into six different sonic environments when listening to music or watching movies.

Midnight Listening Mode

When late night hours or other factors require that the volume be kept low, the surround effects may tend to become less than satisfactory. When the midnight listening mode is on, you can enjoy the effects of quality surround sound even at low volumes.

DVD 5.1 channel input

A special 5.1 Channel input makes the VSX–D409/D409-G/D509S/D509S-G fully compatible with Dolby Digital decoders and DVD players with 5.1 channel outputs.

The Energy-saving Design

This unit is designed to use 1 W of energy when this unit is in standby mode.

Remote Control of Other Components

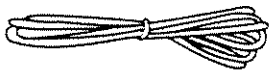
The supplied remote control can be used to operate a variety of other components simply by recalling the appropriate preset codes. In addition, the multi-operation functions allow you to perform a variety of operations automatically.

** Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942 and other worldwide patents issues and pending. "DTS" and "DTS Digital Surround" are trademarks of Digital Theater Systems, Inc. © 1996 Digital Theater Systems, Inc. All rights reserved.*

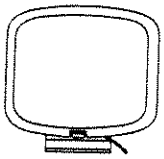
*** Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories. Confidential unpublished works. © 1992-1997 Dolby Laboratories. All rights reserved.*

Checking the Supplied Accessories

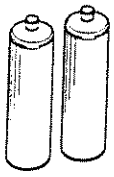
Please check that you've received the following supplied accessories:



FM wire antenna

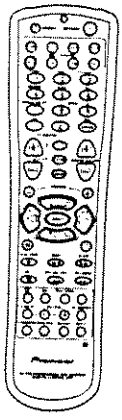


AM loop antenna



Dry cell batteries
Size AA / IEC R6P x 2
(VSX-D409/D409-G)
Size AA / IEC LR6 x 2
(VSX-D509S/D509S-G)

VSX-D409/
D409-G



VSX-D509S/D509S-G

Remote control units

Using this Manual

This manual is for the VSX-D409/VSX-D409-G/ VSX-D509S/VSX-D509S-G audio/video multi-channel receivers. It is divided into two main sections:

Set up

This section covers installing your receiver and connecting up all the other components in your home theater system to it. It also describes how to set up a multi-channel speaker system to take full advantage of the great surround sound features of your receiver.

Operation

This section shows you how to use every feature of the receiver and its remote control unit. It also covers using the supplied remote control to operate your other home theater components. To find out more about a specific button, control or indicator, see Displays & Controls starting on page 29. This will point you to the relevant chapter in the manual. In the Additional Information section (p. 50-52) you'll find a troubleshooting section and specifications.

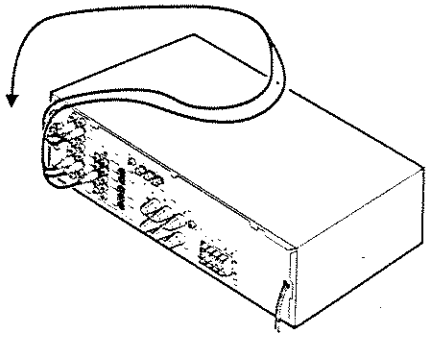
The following symbols are used throughout this manual:

Provides detailed precautions and advice on operations, etc.

Indicates that display is blinking.

When Making Cable Connections

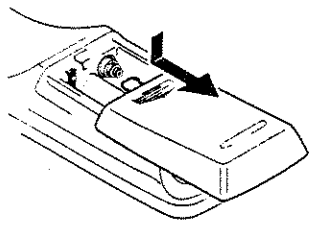
Be careful not to arrange cables in a manner that bends the cables over the top of this unit as shown in the illustration. If the cables are brought over this unit, the magnetic field produced by the transformers in this unit may cause a humming noise to come from the speakers.



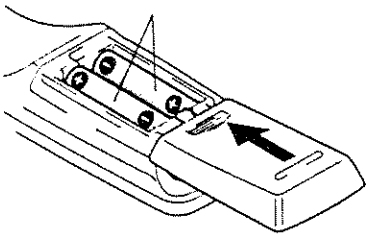
Preparing the Remote Control

Loading the batteries

VSX-D409/D409-G



Dry cell batteries
(AA size IEC R6P × 2)



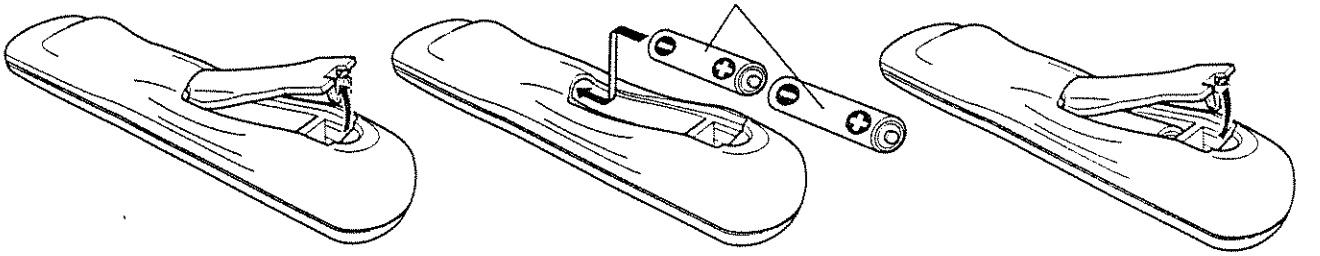
CAUTION!

Incorrect use of batteries may result in such hazards as leakage and bursting. Observe the following precautions:

- Never use new and old batteries together.
- Insert the plus and minus sides of the batteries properly according to the marks in the battery case.
- Batteries with the same shape may have different voltages. Do not use different batteries together.

VSX-D509S/D509S-G

Dry cell batteries
(AA size IEC LR6 × 2)

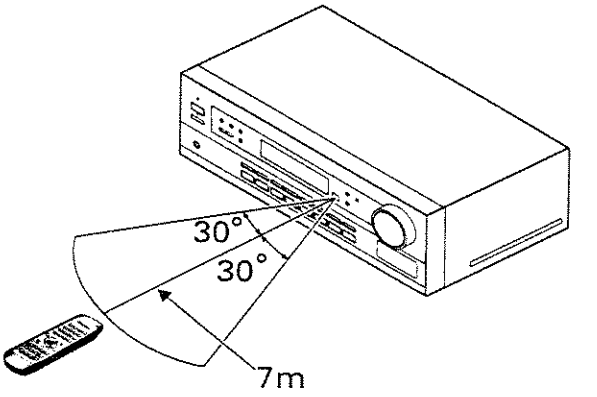


Operating range of remote control unit

memo

The remote control may not work properly if:

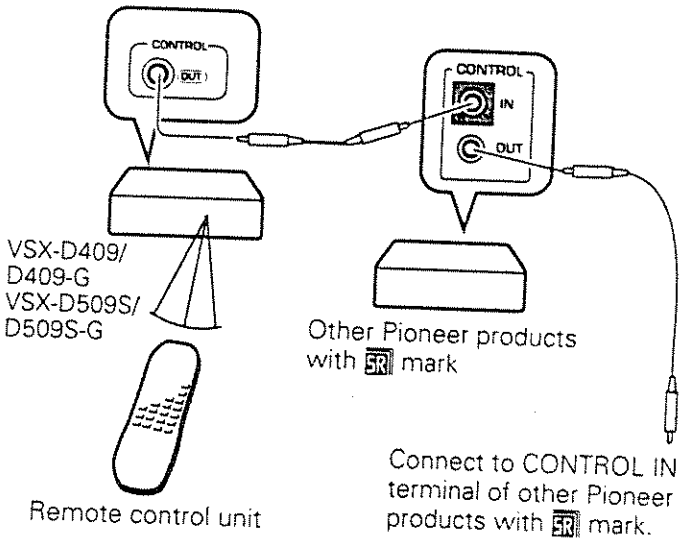
- There are obstacles between the remote control and the receiver's remote sensor.
- Direct sunlight or fluorescent light is shining onto the remote sensor.
- The receiver is located near a device that is emitting infrared rays.
- The receiver is operated simultaneously with another infrared remote control unit.



Operating other Pioneer components

By connecting a control cord (optional), you can control other Pioneer equipment using this remote control unit. Point the remote control unit towards the remote sensor of this unit, even when operating other equipment.

The remote control signals are received by the remote sensor of this unit, and sent to the other devices via the **CONTROL OUT** terminal.



memo

You can also control Pioneer components by pointing the receiver's remote control directly at the component. This type of operation does not require control cords.

Channel Step Setting

The unit has been factory preset to the channel allocation value for the area in which it is to be sold. If this value is set incorrectly, the tunes in frequency may be wrong, or sound may be distorted, resulting in an inability to reproduce reception signals at their proper sound quality. For this reason, be sure to confirm that the values are set correctly before first using the unit.

FM 100 kHz, AM 10 kHz:

Set to this position for areas with an FM reception step of 100 kHz and AM 10 kHz.

FM 50 kHz, AM 9 kHz:

Set to this position, for areas with an FM reception step of 50 kHz and AM 9 kHz.

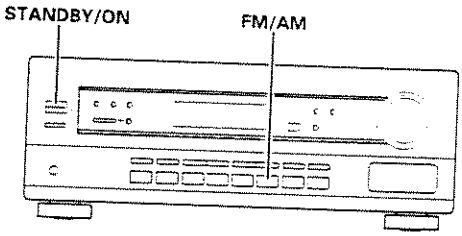
NOTE:

When unsure about the channel allocation for your area, consult your dealer for correct information.

To Change Channel Steps

With the power turned OFF, hold the STANDBY/ON button depressed while pressing the FM/AM function button to turn the power ON.

- Each time the above operation is performed, the channel tuning step will alternate between FM 100 kHz/AM 10 kHz, and FM 50 kHz/AM 9 kHz.



Before making or changing the connections, switch off the power and disconnect the power cord from the AC outlet.

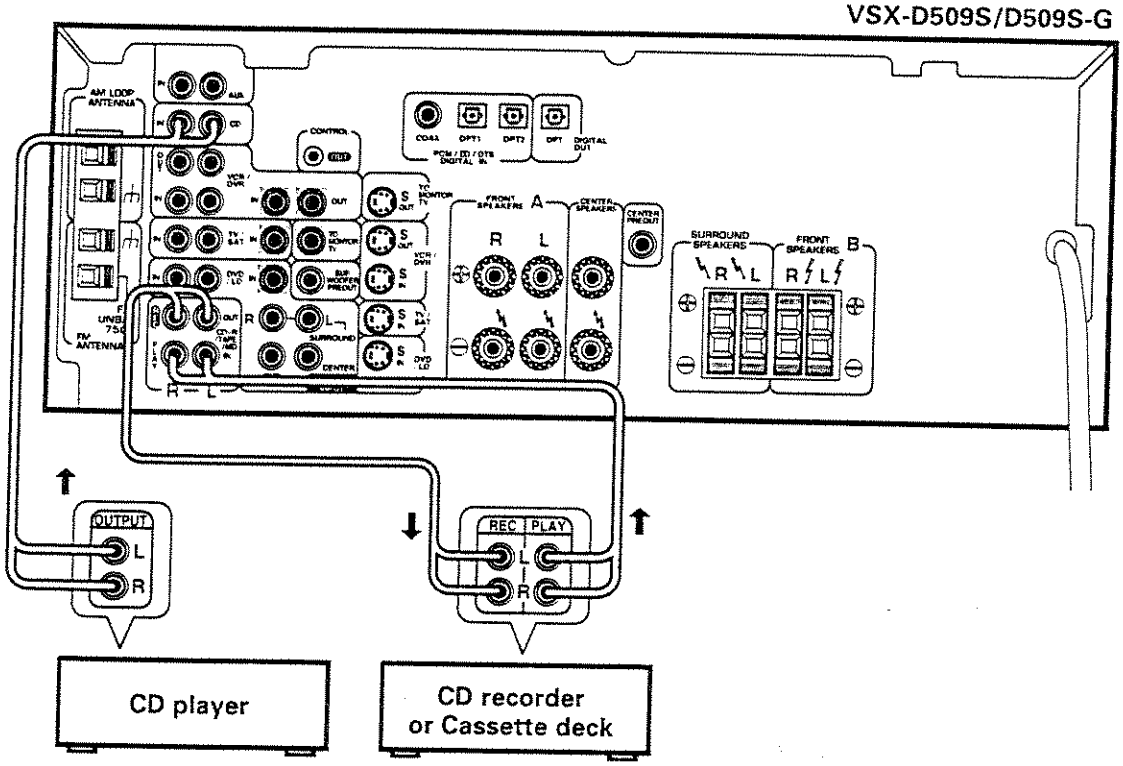
Connecting Audio Components

To begin set up, connect your audio components to the jacks as shown below. These are all analog connections and your analog audio components (cassette deck) use these jacks. Remember that for components you want to record with you need to hook up four plugs (a set of stereo ins and a set of stereo outs), but for components that only play you only need to hook up one set of stereo plugs (two plugs). To use Digital source features you must hook up your digital components to the digital inputs but it is also a good idea to hook up your digital components to analog audio jacks. If you want to record to/from digital components (like an MD) to/from analog components, you must hook up your digital equipment with these analog connections. See p. 10-11 for more on digital connections.

NOTE

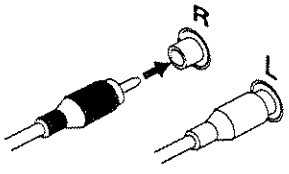
- **Only the VSX-D509S/D509S-G has S-video jacks and optical digital out jack.**
- **The arrows indicate the direction of the audio signal.**

VSX-D509S/D509S-G



■ Audio cords

Use audio cords (not supplied) to connect the audio components.



Connect red plugs to R (right) and white plugs to L (left). Be sure to insert completely.

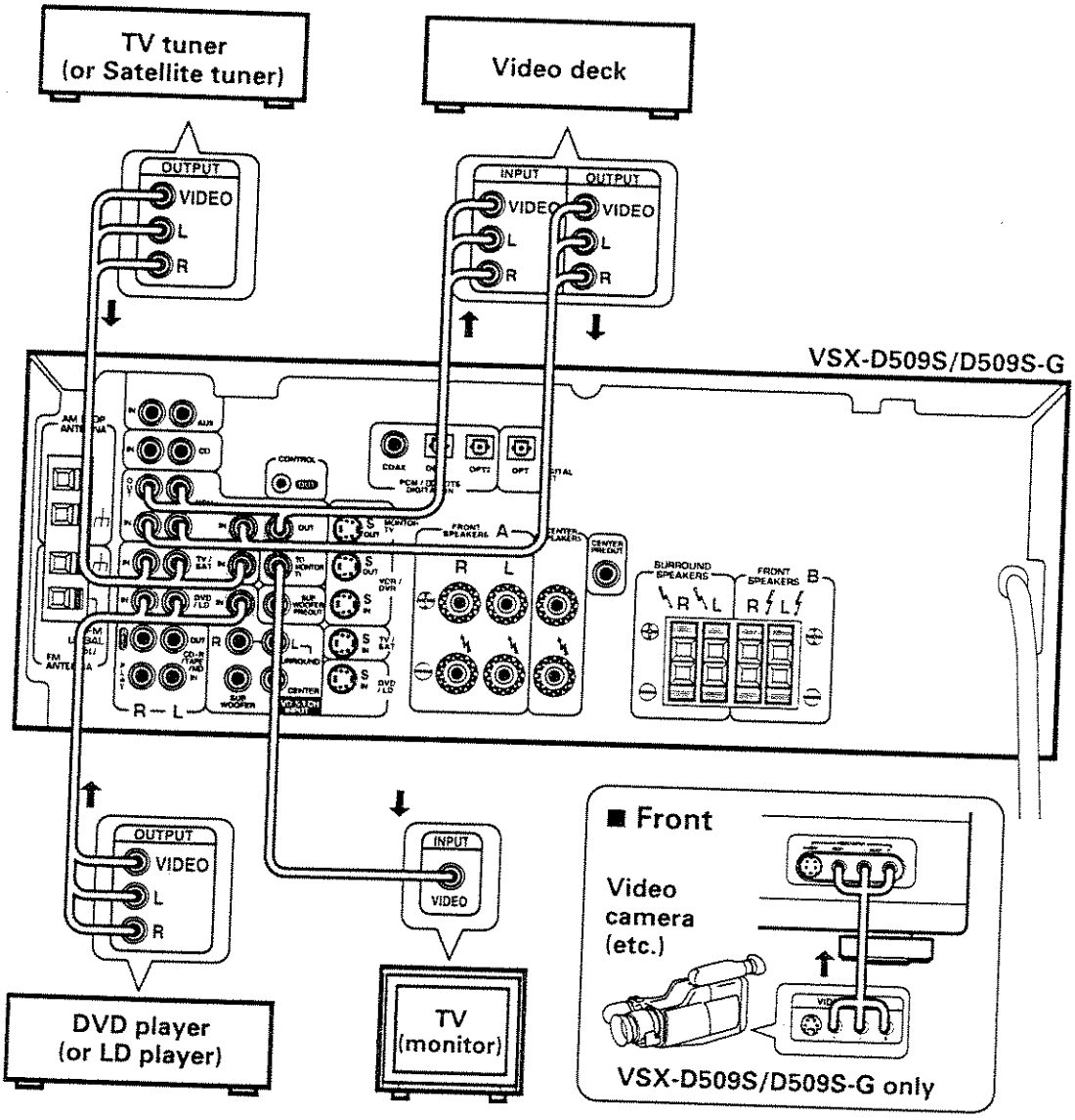
Cassette deck placement

Depending on where the cassette deck is placed, noise may occur during playback of your cassette deck which is caused by leakage flux from the transformer in the receiver. If you experience noise, move the cassette deck farther away from the receiver.

Connecting Video Components

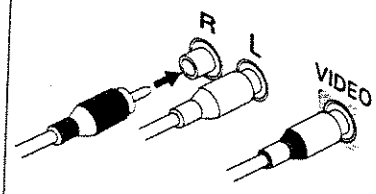
Connect your video components to the jacks as shown below. Regarding digital video components (like a DVD player), you must use the analog connections pictured on this page for the video signal but in order to use Digital source you should hook up their audio to a digital input (see the next page). It is also a good idea to hook up your digital components with analog audio connections as well (see the previous page). To cover all possible laser discs a DVD/LD player or LD player requires an analog connection (as shown here) and two digital connections (see the next page).

When connecting your equipment always make sure the power is turned off and the power cord is disconnected from the wall outlet.



■ Audio/Video cords

Use audio/video cords (not supplied) to connect the video components and a video cord to connect the monitor TV.



Connect red plugs to R (right), white plugs to L (left), and the yellow plugs to VIDEO.
Be sure to insert completely.

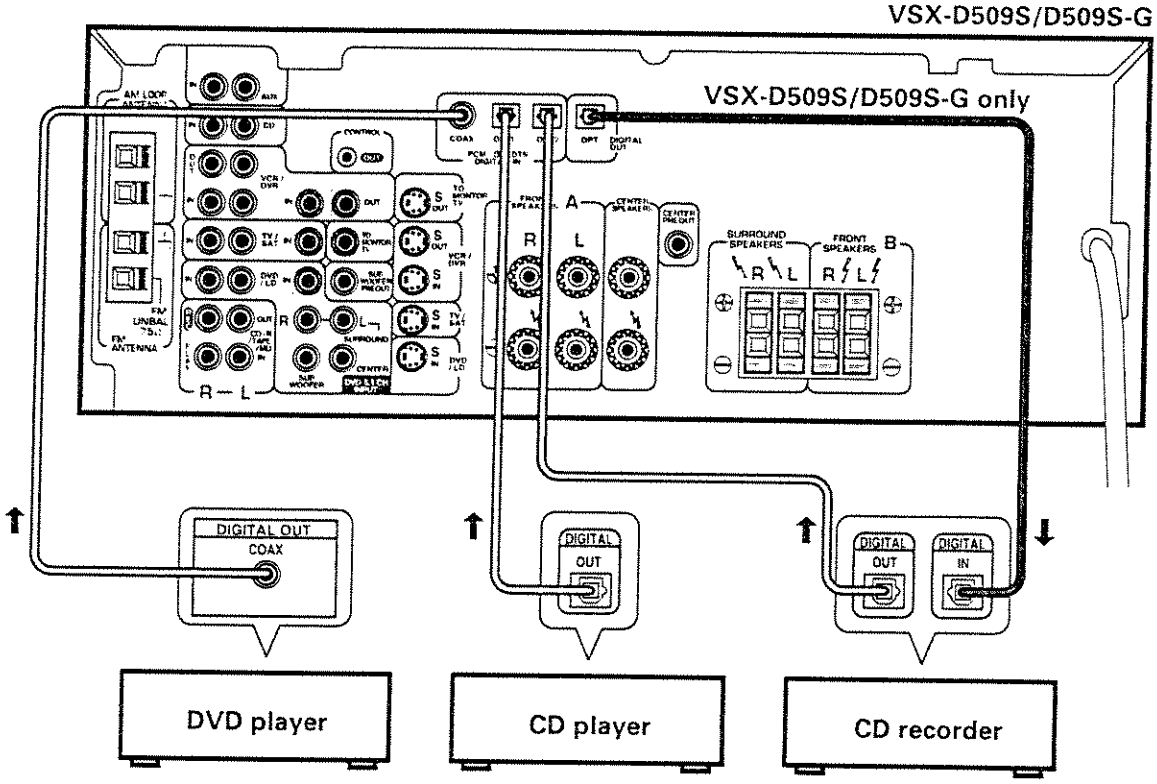
Front video connections are accessed via the front panel input selector as "VIDEO".

memo **VSX-D509S/D509S-G only**

If your video components have S-video jacks, you could use S-video cords (not supplied) to connect them on the front and rear of the receiver. However, if you use S-video cords for your video hook ups you must also hook up your TV with S-video connections. Conversely, if you use regular composite video cords for video hook ups, you should use them for your TV as well.

Connecting Digital Components

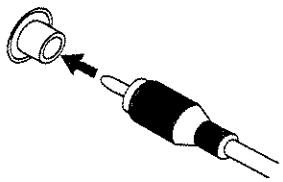
In order to use PCM/DD Digital/DTS soundtracks, you need to make digital audio connections. You can do this by either coaxial or optical connections (you do not need to do both). The quality of these two types of connections is the same but since some digital components only have one type of digital terminal, it is a matter of matching like with like (for example, the coaxial out from the component to coaxial in on the receiver). The VSX-D409/D409-G/D509S/D509S-G has one coaxial and two optical inputs for a total of three digital inputs. Connect your digital components as shown below. There is one digital out jack (VSX-D509S/D509S-G only). If you connect this to the optical input on a digital recorder (currently these include MD, DAT and CD-R) you can make direct digital recordings with this unit.
When connecting your equipment, always make sure the power is turned off and the power cord is disconnected from the wall outlet.



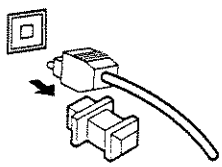
■ Digital audio cords/Optical cables

Commercially available digital audio coaxial cords (standard video cords can also be used) or optical cables (not supplied) are used to connect digital components to this receiver.
When you use optical digital input or output terminals, pull off the caps and insert the plugs. Be sure to insert completely.

Digital audio cord (or standard video cord)



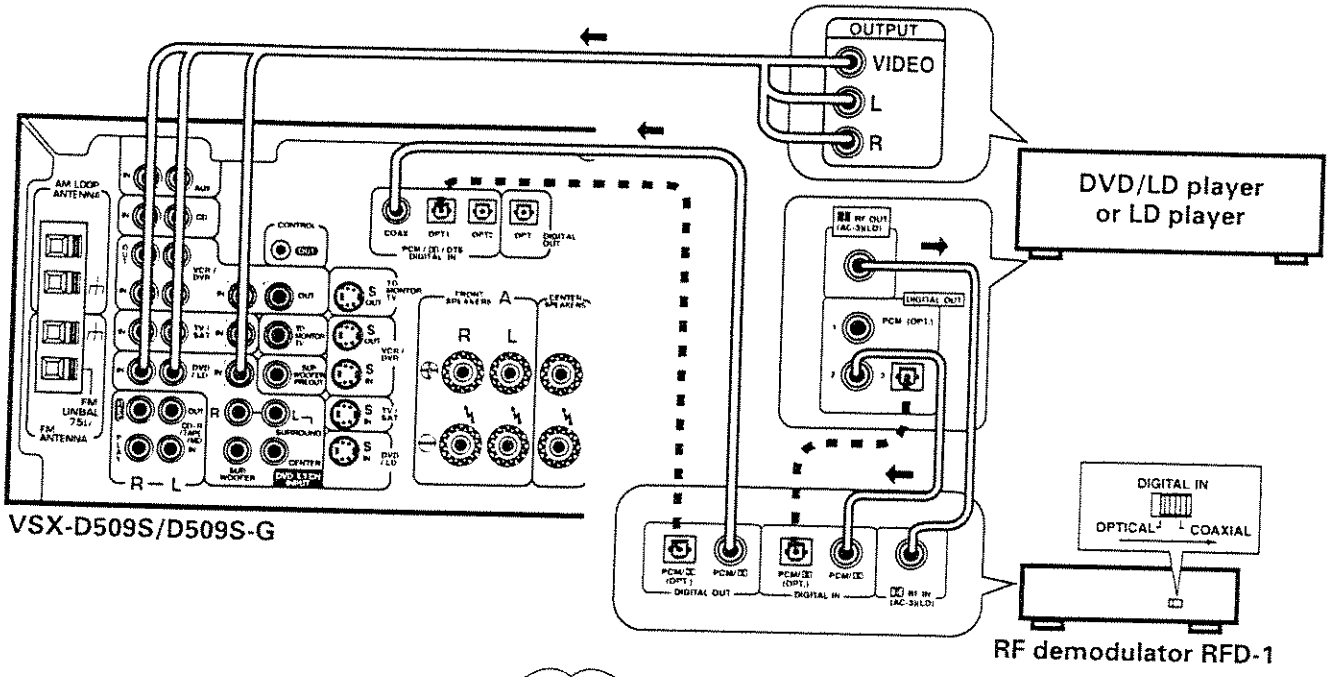
Optical cable



Example of connection using a DVD/LD or LD player

When playing LD recorded in Dolby Digital

To connect a DVD/LD or LD player with its DD RF output, a commercially available RF demodulator (RFD-1) is required. The RF demodulator changes the RF signal to a digital signal which is then processed by the VSX-D409/D409-G/D509S/D509S-G models through their digital input jacks. For more details, refer to the instruction manual supplied with the RFD-1.



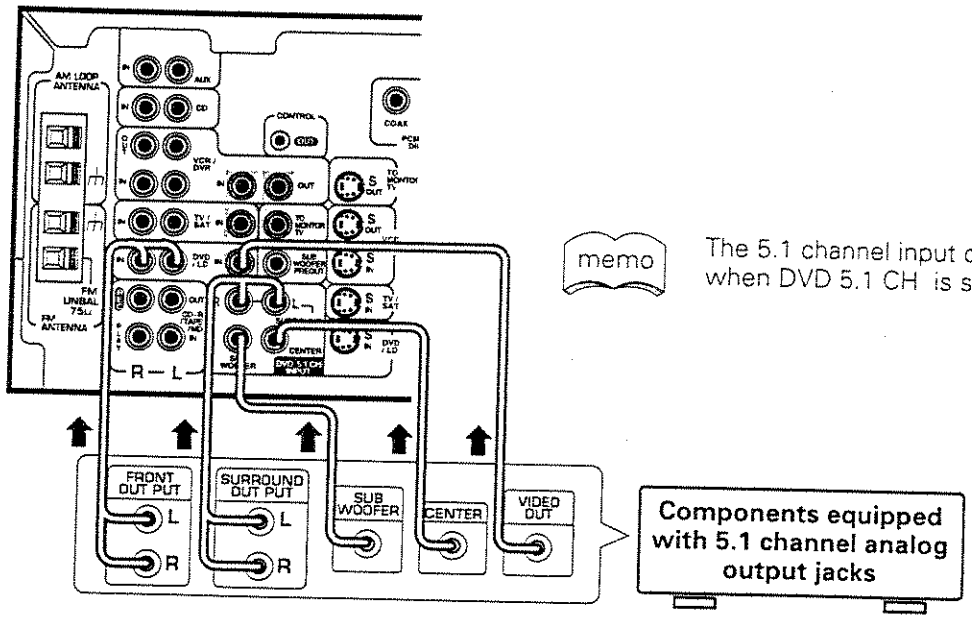
memo

Make sure the RF demodulator digital in switch is set correctly (optical or coaxial depending on the connection).

Connecting DVD 5.1 Channel Components

DVD and LD discs are compatible with both 2 channel and 5.1 channel audio output formats. Connections can be made from a DVD player, multi-channel decoder equipped with 5.1 analog outputs to the 5.1 analog inputs on this unit. Always make sure that the receiver is switched off and unplugged from the wall outlet before making or changing any connections.

VSX-D509S/D509S-G



memo

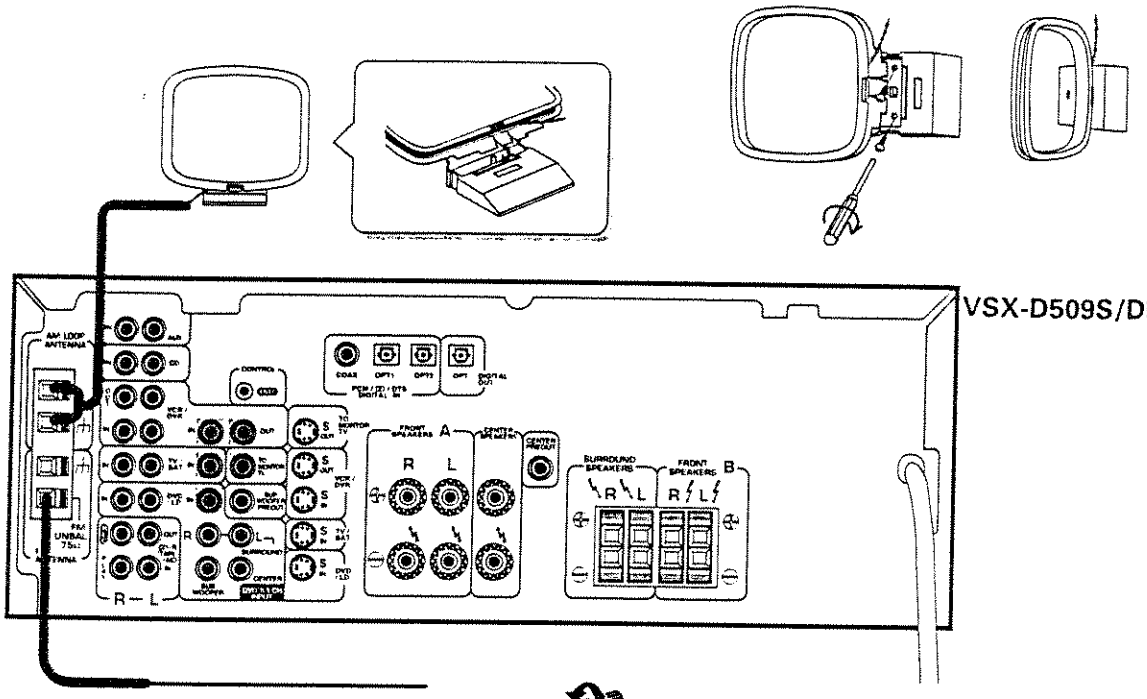
The 5.1 channel input can only be used when DVD 5.1 CH is selected.

Connecting Antennas

Connect the AM loop antenna and the FM wire antenna as shown below. To improve reception and sound quality, connect external antennas (see Using external antennas, below). Always make sure that the receiver switched off and unplugged from the wall outlet before making or changing any connections.

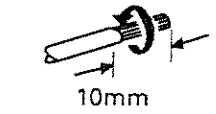
AM loop antenna

Assemble the antenna and connect to the receiver. Attach to a wall, etc. (if desired) and face in the direction that gives the best reception.



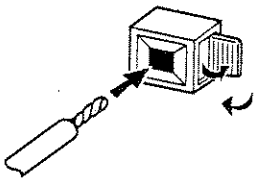
FM wire antenna

Connect the FM wire antenna and fully extend vertically along a window frame or other suitable area, etc.



Antenna snap connectors

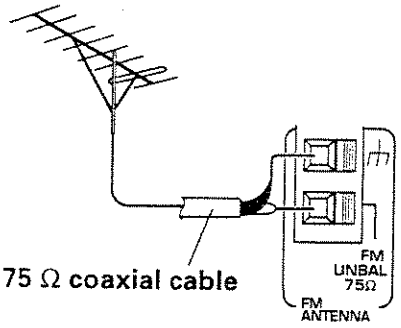
Twist the exposed wire strands together and insert into the hole, then snap the connector shut.



Using external antennas

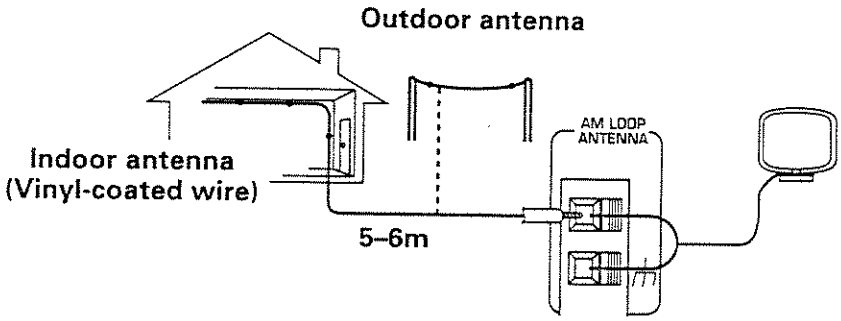
■ To improve FM reception

Connect an external FM antenna.



■ To improve AM reception

Connect a 5-6 m length of vinyl-coated wire to the AM antenna terminal without disconnecting the supplied AM loop antenna. For the best possible reception, suspend horizontally outdoors.



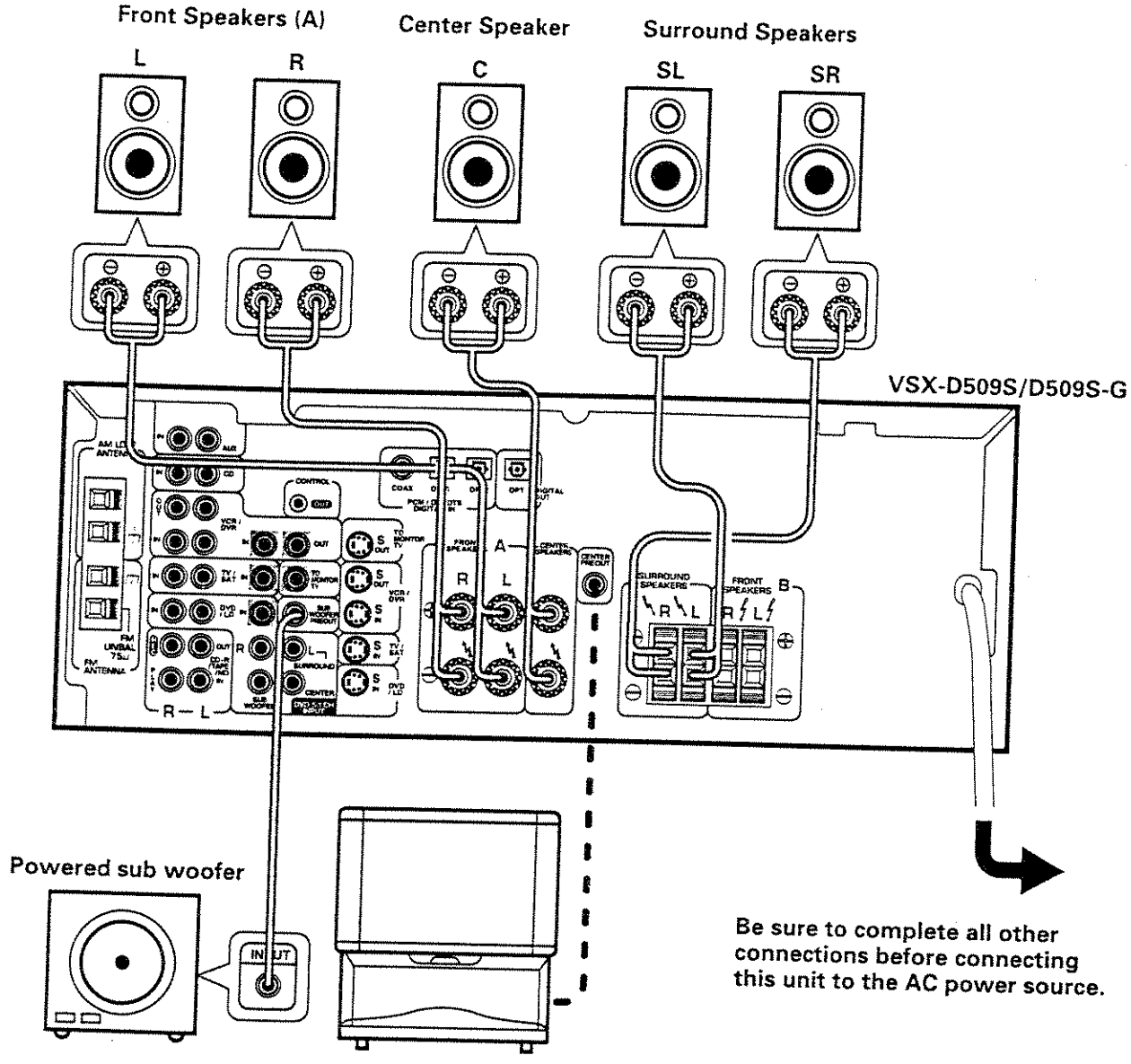
Connecting Speakers

A full complement of six speakers is shown here but, naturally, everyone's home setup will vary. Simply connect the speakers you have in the manner described below. The receiver will work with just two stereo speakers (called "front" speakers in the diagram) but it is recommended to be used with at least three speakers. Make sure you connect the speaker on the right to the right terminal and the speaker on the left to the left terminal. Also make sure the positive and negative (+/–) terminals on the receiver match those on the speakers.

memo

The receiver has two speaker systems, A & B. A is the main system supporting the full complement of surround sound speakers. If you switch on both A & B speaker systems, only front speakers and the sub woofer will be audible. No sound will come from the center or surround speakers but multi channel sources will be down-mixed to the active speakers so no sound will be lost. Similarly, if you choose just the B system you'll only hear the front speakers connected to the B system and multi channel sources will be down-mixed to these two speakers.

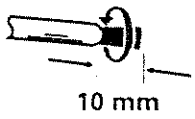
- Use speakers with a nominal impedance of 8 Ω to 16 Ω.



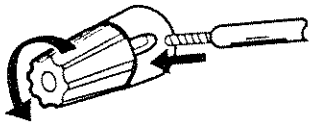
When using the speaker on your TV as the center speaker, connect the CENTER PREOUT jack on this unit to the audio input jack on your TV. In this case, the center speaker shown is unnecessary.

■ Speaker terminals

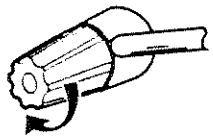
1 Twist exposed wire strands together.



2 Loosen speaker terminal and insert exposed wire.

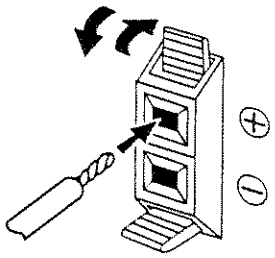


3 Tighten terminal.



Use good quality speaker wire to connect the speakers to the receiver.

1 Twist around 10 mm of bare wire strands together.
2 Unclip the speaker terminal and insert the wire.
3 Snap shut the speaker terminal to secure.



Hints on speaker placement

Speakers are usually designed with a particular placement in mind. Some are designed to be floorstanding, while others should be placed on stands to sound their best. Some should be placed near a wall; others should be placed away from walls. Follow the guidelines on placement that the speaker manufacturer provided with your particular speakers to get the most out of them.

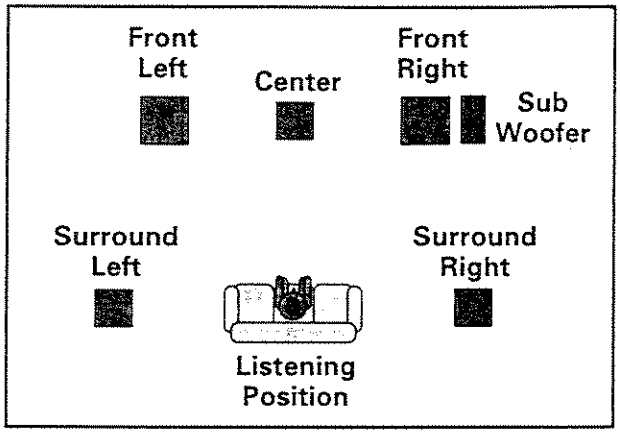
- Place the front left and right speakers at equal distances from the TV.
- When placing speakers near the TV, we recommend using magnetically shielded speakers to prevent possible interference, such as discoloration of the picture when the TV is switched on. If you do not have magnetically shielded speakers and notice discoloration of the TV picture, move the speakers farther away from the TV.
- Install the center speaker above or below the TV so that the sound of the center channel is localized at the TV screen.

CAUTION!
If you choose to install the center speaker on top of the TV, be sure to secure it with putty, or by other suitable means, to reduce the risk of damage or injury resulting from the speaker falling from the TV in the event of external shocks such as earthquakes.

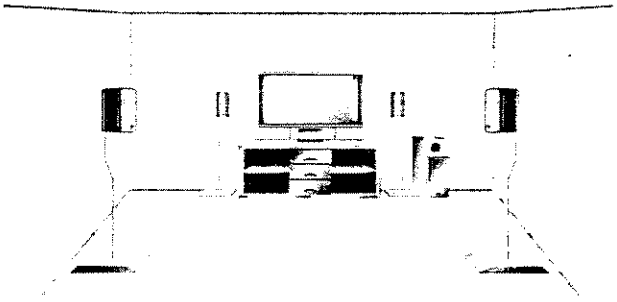
- If possible, install the surround speakers slightly above ear level.
- Try not to install the surround speakers farther away from the listening position than the front and center speakers. Doing so can weaken the surround sound effect.

To achieve the best possible surround sound, install your speakers as shown below. Be sure all speakers are installed securely to prevent accidents and improve sound quality.

Overhead view of speaker set up



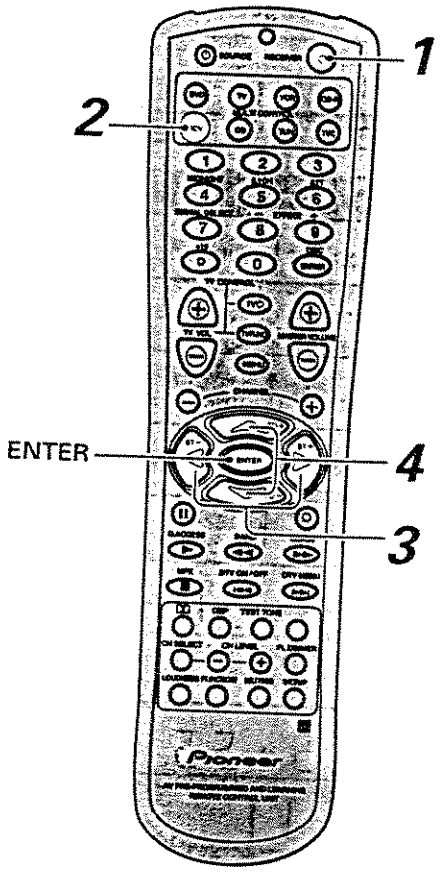
3-D view of speaker set up



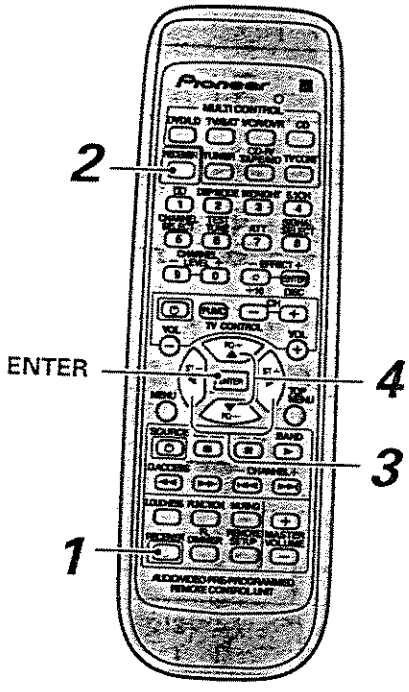
Setting Up for Surround Sound

Be sure to switch the power of this unit on (The STANDBY indicator goes out).
To ensure the best possible surround sound, be sure to complete the following set up operations. This is particularly important when using the DD (Dolby) surround mode. You only need to make these settings once (unless you change the placement of your current speaker system or add new speakers, etc.). Refer to the following pages for detailed descriptions of the settings available for each mode.

VSX-D509S/D509S-G



VSX-D409/D409-G



1 Press RECEIVER ⏻ to turn the power on.

The STANDBY indicator goes out.

2 Press RCV.

This switches the remote to the surround setup mode. (On the VSX-D409/D409-G the button is called RECEIVER.)

3 Press ◁ or ▷ to select the mode you want to set.

For best results, start with "Speakers setting mode" and make your initial adjustments in the order described below.
The current settings are displayed automatically.

Speakers (Front, Center, Surround) setting mode (page 16)
Use to specify the type of speakers you have connected.

SUB WOOFER ON/PLUS/OFF setting mode (page 17)
Use to specify the sub woofer as on or off.

Crossover frequency setting mode (page 17)
Use to determine which frequencies will be sent to the sub woofer (or "Large" speakers if you don't have a sub woofer).

LFE attenuator setting mode (page 17)
Use to specify the peak level for the LFE channel and the crossover network for rerouted bass frequencies.

Low cut filter ON/OFF setting mode (page 18)
Use to cut the distorted sound from the sub woofer.

FRONT speakers distance setting mode (page 18)
Use to specify the distance from your listening position to your front speaker.

CENTER speaker distance setting mode (page 18)
Use to specify the distance from your listening position to your center speaker.

SURROUND speakers distance setting mode (page 18)
Use to specify the distance from your listening position to your surround speakers.

Dynamic range control setting mode (page 19)
Use to compress the dynamic range of the sound track.

Dual mono setting mode (page 19)
Use with DD Digital software that has dual mono encoding if you want to isolate one channel or listen in this specialized mono mode.

Coaxial digital input setting (page 19)
Use to specify the input to be assigned to the coaxial digital input.

Optical digital input setting (page 20)
Use to specify the input to be assigned to the optical digital input.

4 Press △ or ▽ to select the setting you want.

The setting is entered automatically.

5 Repeat steps 3 and 4 to set other surround modes.

memo

Press ENTER to exit the setting mode.
The setting mode is automatically exited if no operation is performed for 10 seconds.

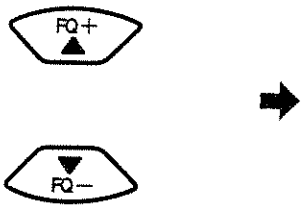
Speakers (Front, Center, Surround) setting mode

This setting establishes the size and configuration of the speaker system you have connected. So, for example, here you set whether you have connected surround speakers or not, and how big they are. Selecting "Large" or "Small" will determine how much bass is sent by the receiver to the speakers being set. This setup system has certain constraints. For example, all your speakers cannot be set to "Large," you need to decide which speakers should receive the most bass and set them to "Large."
In the display, "F", "C", and "S" refer to front, center, and surround speakers respectively. Speaker size is denoted as "L" for large speakers, "S" for small speakers, and "*" (asterisk) if no speaker is connected.

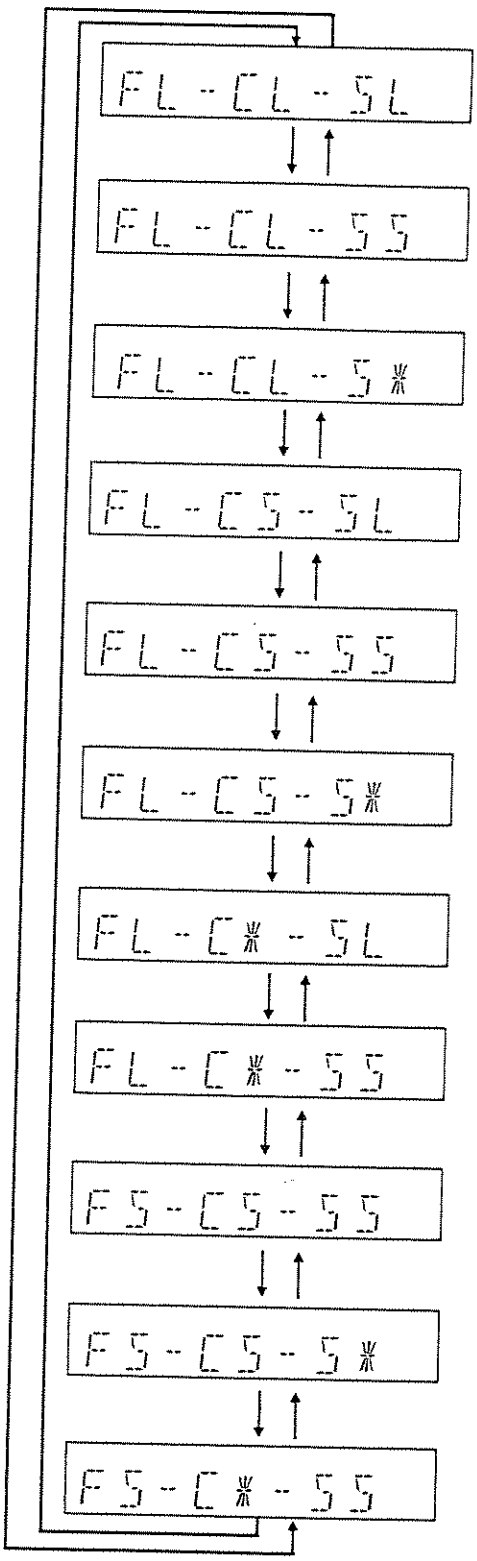
memo If the cone size (diameter) of the speaker is larger than 12 cm, please set to Large.

Switch the speakers setting mode according to the speakers you hooked up. Use the △ or ▽ buttons.

The configurations shown on the right will appear in the display on the front of the receiver. One of them should match your speaker set up. Cycle through the different possibilities until you find the one that matches your set up.



* Press ▷ to advance to the next receiver setting, and press ◁ to return to a previous receiver setting.

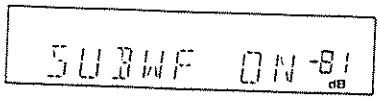


SUB WOOFER ON/PLUS/OFF setting mode

Sets whether the SUB WOOFER is used or not. Also, when used you have the option to use the "PLUS" setting.

memo

- Initial setting is "ON".
- Setting the front speaker size to "Small" in the Speakers setting mode automatically locks the sub woofer in the "ON" position.
- Use the PLUS for extra bass. When you use PLUS, you will get the bass sounds from the sub woofer even if the front speakers are set to "Large".



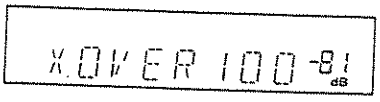
Press △ or ▽ to select sub woofer ON, PLUS or OFF.

Crossover frequency setting mode

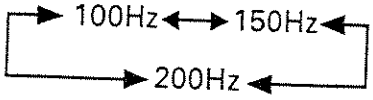
Crossover frequency is the point where the receiver divides the high and low sounds (the frequencies) between the speakers. Since most smaller speakers can't handle deep bass tones, this setting allows you to send those sounds to the sub woofer (or speakers set to "Large" if you don't have a sub woofer) instead of the speakers set to "Small" in your system. Choose the point at which you want the frequency routed to the sub woofer (or "Large" speakers).
We recommend setting this to 200 Hz if smaller bookshelf-type speakers are used for your "Small" speakers.

memo

- Initial setting is "100 Hz".
- If all speakers (front, center, and surround) are set to "Large" in SPEAKERS setting mode, crossover frequency cannot be set because there are no "Small" speakers (* * * appears in the display).



Press △ or ▽ to specify the crossover frequency for your small speakers (100 Hz, 150 Hz or 200 Hz).



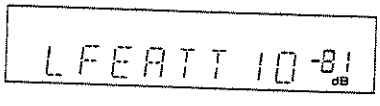
100 Hz
Sends bass frequencies below 100 Hz to the sub woofer (or "Large" speakers).
150 Hz
Sends bass frequencies below 150 Hz to the sub woofer (or "Large" speakers).
200 Hz
Sends bass frequencies below 200 Hz to the sub woofer (or "Large" speakers).

LFE attenuator setting mode

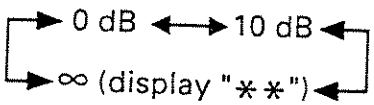
Dolby Digital and DTS audio sources include ultra-low bass tones. Set the LFE attenuator as needed to prevent the ultra-low bass tones from distorting the sound from the speakers.

memo

- Initial setting is "0 dB".
- When ∞ is selected (* * appears in the display), LFE is not available.



Press △ or ▽ to set the attenuation level (0 dB, 10 dB or ** dB(∞)).

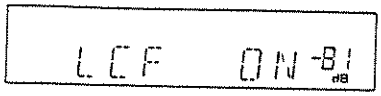


Low cut filter ON/OFF setting mode

Turn the low cut filter ON when distorted sound is output through the sub woofer.

memo

- Initial setting is "OFF".
- If the SUB WOOFER is set to "OFF" in the SUB WOOFER ON/OFF setting mode, the low cut filter cannot be set.



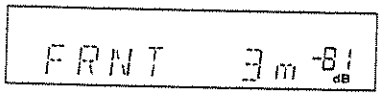
Press △ or ▽ to select low cut filter ON or OFF.

FRONT speakers distance setting mode

Sets the distance from the FRONT speakers to the listening position.

memo

- Initial setting is 3 m.
- One step equals about 30 cm.



Press △ or ▽ to set the distance of the FRONT speakers from the main listening position (up to 30 steps).

CENTER speaker distance setting mode

Normally as the Center speaker is placed directly in front in the listening room, it is closer to the listening position than the Front speakers. This means that the sound from the Center speaker will be heard before the Front speakers. To prevent this, set the Center speaker distance setting to delay the sound from the Center speaker so that the sound from the Front and Center speakers will be heard at the same time.

memo

- Initial setting is 3 m.
- When "C✱" is selected in Speakers setting mode, the CENTER distance cannot be set.
- One step equals about 30 cm.

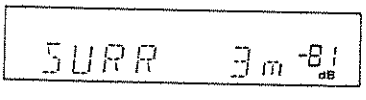
Press △ or ▽ to set the distance of the CENTER speaker from the main listening position (up to 30 steps).

SURROUND speakers distance setting mode

Use to set the SURROUND speakers distance. Like the CENTER speaker position, the SURROUND speakers may be set in a location closer or farther than the FRONT speakers. Set the distance of the SURROUND speakers accurately to hear sounds coming from both FRONT and SURROUND speakers at the same time.

memo

- Initial setting is 3 m.
- When "S✱" is selected in Speakers setting mode, the SURROUND distance cannot be set.
- One step equals about 30 cm.



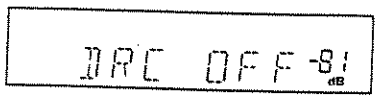
Press △ or ▽ to set the distance of the SURROUND speakers from the main listening position (up to 30 steps).

Dynamic range control setting mode

Dynamic range is the difference between the loudest and softest sounds in any given signal. The dynamic range control helps you play back sounds so the quieter sounds are audible yet the louder sounds don't get distorted. It does this by compressing the dynamic range. When watching a movie at low volume, setting this function enables low level sounds to be heard more easily but you won't be jolted by louder sounds.

memo

- Initial setting is "OFF".
- When the volume level is increased, set to OFF.
- For listening enjoyment at low volumes, set to "MAX" for maximum dynamic range compression.
- Dynamic range control is effective only when a Dolby Digital signal is being played back.



Press △ or ▽ to set the dynamic range control (OFF, MAX, or MID).

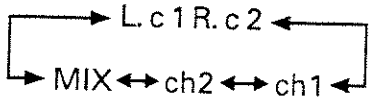
Dual mono setting

The dual mono setting can only be used when listening to Dolby Digital discs that have dual mono software encoded in them. With this setting you can choose which channel in the dual mono setting you want to listen to. Thus, it is useful for soundtracks that have one language on one channel and a different language on the other. Remember you can only use this setting if you have Dolbly Digital software with this feature and want to isolate one of the channels therein. Otherwise, just ignore this function.

There are two different ways to route the sound in the dual mono setting, one is with Dolby Digital mode on, the other with Dolby Digital mode off. If Dolby Digital mode is switched on, the ch1 setting will play channel 1 through your center speaker. The ch2 setting will play channel 2 though your center speaker and the MIX setting will play both channels through the center speaker. With Dolby Digital mode off, the dual mono sound routing is as follows: In the ch1 setting your will hear channel 1 out of both front speakers. In the ch2 setting you will hear channel 2 out of both speakers. In the L. c1 R. c2 setting the speakers will play the soundtrack independently of each other. The left front speaker will play channel 1 and the right front speaker will play channel 2. The last setting, MIX, mixes both channels and plays them out of both speakers .

memo

- The default setting of this feature is L. C 1 R. C 2.



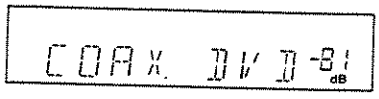
Press △ or ▽ to cycle through the possible Dual mono settings.

Coaxial digital input setting

Sets the input component to be assigned to the coaxial digital input jack.

memo

- Initial setting is "DVD".



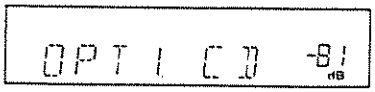
Press △ or ▽ to select the coaxial digital input (DVD, TV, CD, CD-R, VCR, DVR or OFF).

After you assign the component to a digital jack, like coaxial one, whenever you select that component, for example CD, the receiver will automatically change to the digital input setting. You can see this in the DIGITAL/ANALOG indicator on the front of the receiver.

Optical digital input setting 1

Sets the input component to be assigned to the optical input jack 1.

memo • Initial setting is "CD".



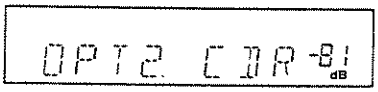
Press △ or ▽ to select the optical digital input 1 (DVD, TV, CD, CD-R, VCR, or OFF).

After you assign the component to a digital jack, like optical one, whenever you select that component, for example CD, the receiver w automatically change to the digital input setting. You can see this in th DIGITAL/ANALOG indicator on the front of the receiver.

Optical digital input setting 2

Sets the input component to be assigned to optical input jack 2.

memo • Initial setting is "CD-R".



Press △ or ▽ to select the optical digital input 2 (DVD, TV, CD, CD-R, VCR, or OFF).

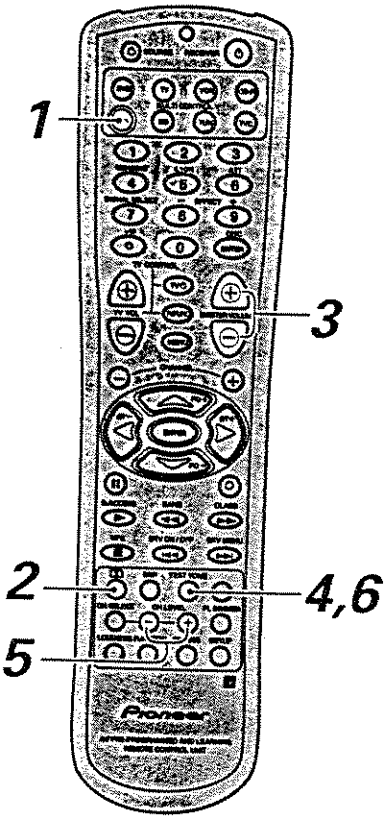
After you assign the component to a digital jack, like optical one, whenever you select that component, for example CD, the receiver wi automatically change to the digital input setting. You can see this in the DIGITAL/ANALOG indicator on the front of the receiver.

Setting the Volume Level of Each Channel (Adjusting the Speaker Volume Balance)

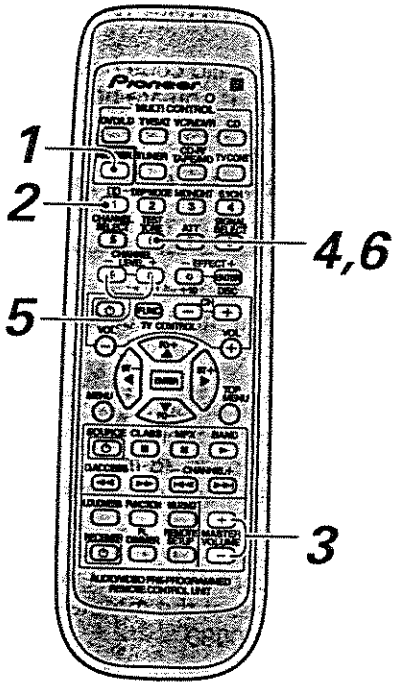
memo

- Since the SUB WOOFER transmits an ultra-low frequency its sound may seem quieter than it actually is.
- The speaker volume can be adjusted without outputting the test tone by pressing CHANNEL LEVEL+/– and CHANNEL SELECT .
- Initial setting is 0 dB.

VSX-D509S/D509S-G



VSX-D409/D409-G



1 Press RCV.

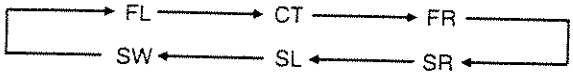
This switches the remote to the surround setup mode. (On the VSX-D409/D409-G the button is called RECEIVER.)

2 Press ▯▯.

3 Press MASTER VOLUME + or – to adjust the volume to an appropriate level.

4 Press TEST TONE to output the test tone.

The test tone is output in the following order.



memo Test tone is only output in Dolby/DTS modes.

5 Adjust speaker levels so that you hear the test tone at the same volume from each speaker when seated in the main listening position.

The channel level range is ± 10 dB.

memo Levels can be set for each surround mode.

6 Press TEST TONE to turn off the test tone.

Setting Up the Remote Control

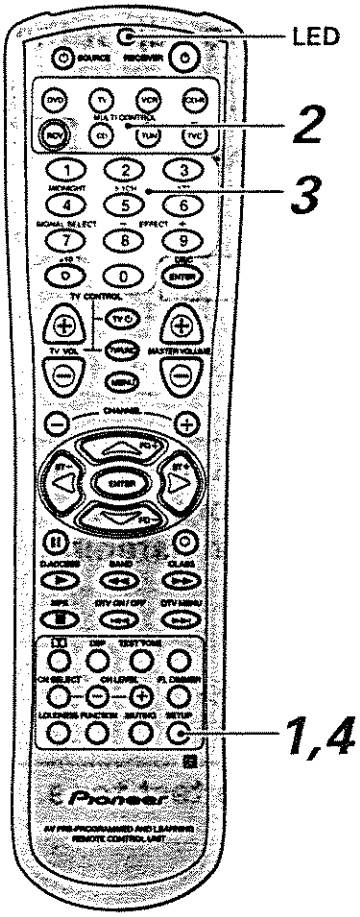
In addition to controlling the receiver, the supplied remote control can operate your other components (DV MD, VCR, TV, LD, CD, etc.). If your component(s) are listed in the "Preset Code List", simply recall the corresponding preset code.

Recalling preset codes (VSX-D509S/D509S-G)

The following steps show you how to recall preset codes for each MULTI CONTROL button. Once the pre code is assigned, pressing the button will automatically set the remote to operate the respective compone

memo

- Refer to "Preset Code List" on pages **i** to **v** for the components and manufacturers available
- Refer to "Controlling the Rest of Your System" on pages 45 to 49 for detailed explanations how to operate your other components.



1 Press SETUP and hold for three seconds to select the preset mode.

The LED will blink twice.

(**To cancel the preset mode** Press SETUP.)

2 Press the MULTI CONTROL button for the component you want to control.

Each button can be set to control one of the following compone

- : DVD/LD player or DVD Recorder
- : TV , Satellite tuner or Cable TV tuner
- : CD player, CD-R, Tape deck or MD recorder
- : CD player, CD-R, Tape deck or MD recorder
- : VCR or DVR (DVD Recorder)
- : TV , Satellite tuner or Cable TV tuner
- : FM/ AM tuner

3 Use the number buttons to enter the 4 digi preset code.

The LED will blink after each digit is input and will blink twice to confirm a valid code has been input.
If the LED shows one long blink it means an invalid code has bee input. Check the preset code list and try again. If you are not abl input a preset code you can refer to page 25 to teach the remote control individual commands.
Repeat steps 1 through 3 to assign preset codes for as many components as necessary.

4 Press SETUP to exit the preset mode.

The remote control returns to the previous operation mode.
It will also return to the previous mode after ten seconds of inac

memo

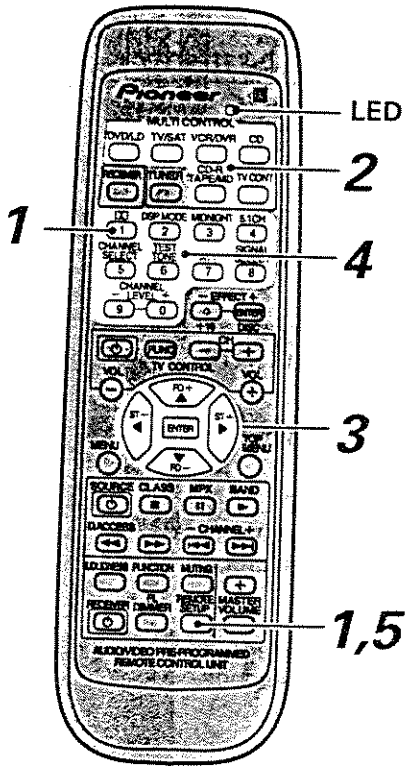
- The RCV (Receiver) button cannot be preset.
- You can only input a code for the component type writt each MULTI CONTROL button. See page 28 for informa on how to program a different type of component than specified on the button.
- If you recall a preset code for the tuner (TUN MULTI COTROL), you will not be able to control the built-in tun this receiver using the remote. To reset the remote to t built-in tuner, input the preset code 0080.

Recalling preset codes (VSX-D409/D409-G)

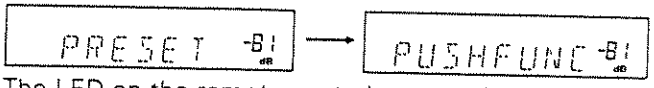
The following steps show you how to recall preset codes for each MULTI CONTROL button. Once the preset code is assigned, pressing the button will automatically set the remote to operate the respective component.

memo

- Refer to "Preset Code List" on page v for the components and manufacturers available.
- Refer to "Controlling the Rest of Your System" on pages 45 to 49 for detailed explanations on how to operate your other components.



1 Press REMOTE SET UP and 1 at the same time to select the preset mode.



The LED on the remote control starts to blink.

To cancel the preset mode at any time

Press REMOTE SET UP.

2 Press the MULTI CONTROL button for the component you want to control.

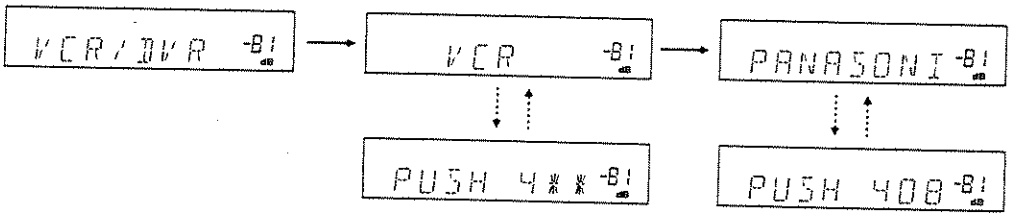
Each button can be set to control one of the following components

DVD/LD	: DVD or LD player
TV/SAT	: TV or Satellite tuner
VCR/DVR	: VCR or DVR (DVD Recorder)
CD	: CD player
CD-R/TAPE/MD	: CD Recorder or Tape deck or MD player
TV CONT	: TV or Cable TV tuner

The LED lights steadily and the first manufacturer (and preset code(s)) appear in the display.

If no commands are entered the receiver automatically exits the preset code mode after 20 seconds.

3 Press △ or ▽ repeatedly to display the name of the component's manufacturer.



If necessary, press ◁ or ▷ to see if an alternative code from the same manufacturer is available.

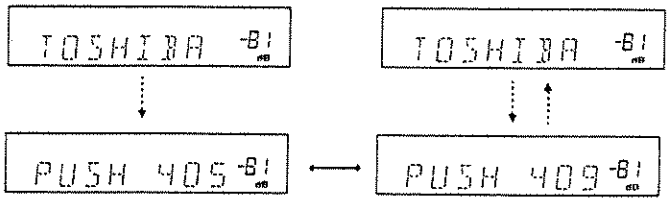
A list of all available preset codes is provided on page 56.

If no commands are entered the receiver automatically exits the preset code mode after 20 seconds.

(continues on next page)

4 Point the remote toward the component to be controlled, enter the 3 digit preset code.

When you enter the preset code, the remote emits a power ON/OFF signal. If the component turns ON or OFF, you have entered the proper code.
If the component does not turn ON or OFF and there is more than one preset code, press ◁ or ▷ to select another code in step 3 or try inputting another code (starting again from step 2).
Some manufacturers use several sets of remote control signals and the first code may not correspond to your component.



Repeat steps 2 through 4 to assign preset codes for as many components as necessary.

5 Press REMOTE SET UP to exit the preset mode.

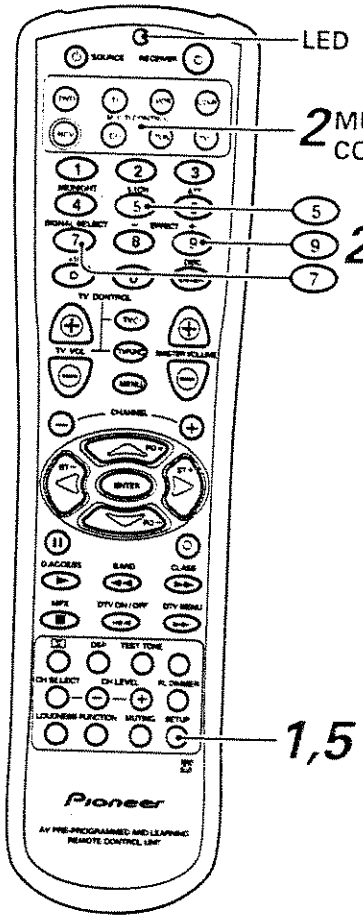
The remote control returns to the previous operation mode.

memo

- When operating a PIONEER DVD/LD player, set the manufacturer code to "111" in the preset mode.
- All codes enrolled in the manufacturer code list can be set even if a code is not displayed.
- TUNER cannot be preset.
- If no commands are entered the receiver automatically exits the preset code mode after 20 seconds.

Learning mode: Programming signals from other remote controls (VSX-D509S/D509S-G only)

If preset codes are not available for your component(s), or the available preset codes do not operate correctly, you can use this function to program in signals from the remote control(s) of your other component(s). This operation can also be used after recalling a preset code to program additional operations not covered in the preset codes.



1 Press SETUP and hold for three seconds.

The visible LED will blink twice.

2 Press the MULTI CONTROL button for the component you want to control and then press (9), (7), then (5) to select the Learning setup mode. The remote is ready to learn new commands from other remote controls.

The LED flashes rapidly.

To cancel LEARNING setup mode

Press SETUP button.

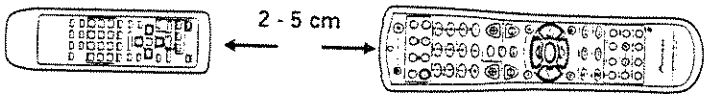
After ten seconds if no commands are entered the remote will revert to its previous mode.

3 Press the button to be programmed (for example the ► [play] button).

4 Point the remote controls at each other, about 2-5 cm apart, and press the button on the other remote control for the operation you want to program .

1 Point the remote controls toward each other.

2 Press the button on the other remote control corresponding to the operation you wish to program. The LED on this receiver's remote will go out and then blink twice when the operation is learned. Press the teaching key repeatedly, varying the distances between the remotes, until you see this receiver's remote blink twice, indicating the operation has been learned.



To program additional operations for the current component

Repeat steps 3 and 4.

To program operations for another component

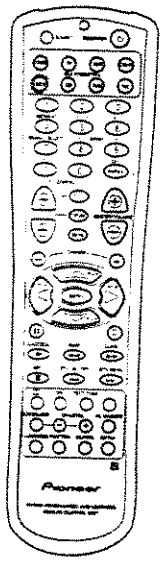
Repeat steps 2 through 4.

5 Press SETUP to exit the LEARNING setup mode.

After ten seconds of inactivity the remote control will automatically leave the Learning mode and revert to its previous mode.

memo

The highlighted keys can learn new functions.

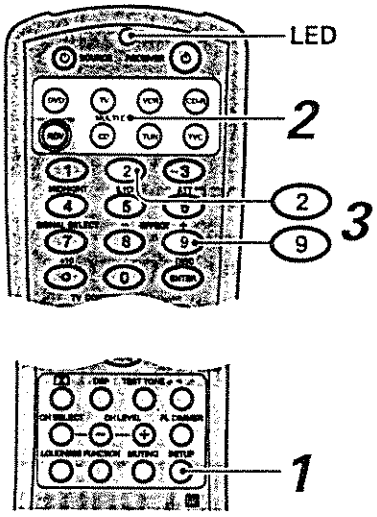


memo

Some commands from other remote controls cannot be learned, but in most cases the remotes just need to be moved closer together or farther apart.

Programming a Different Component into a MULTI CONTROL button (VSX-D509S/D509S-G)

This feature changes a selected MULTI CONTROL button to a different component. For example, if you don't have a second TV, but you do have a second VCR, you could reassign the TV MULTI CONTROL to VCR so tha VCR control buttons are available when you select TV.



1 Press SETUP and hold for three seconds.

The LED will blink twice.

2 Press the MULTI CONTROL button which you want to change.

For the example above, press VCR.

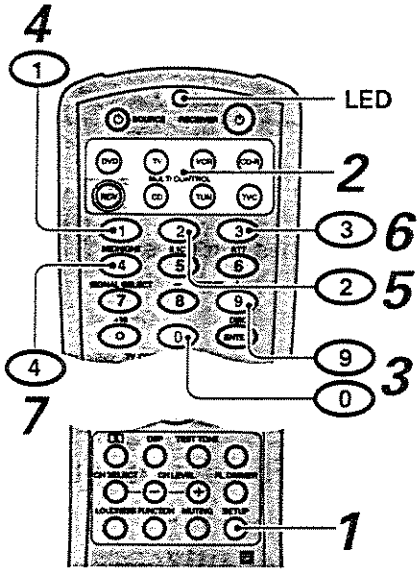
3 Press ⑨, ⑨, then ②.

4 Press the MULTI CONTROL button which you want to be duplicated.

In the above example, press TV. The LED will blinks twice. The TV button will now make the remote function as a VCR controller. Remember to assign the correct preset code for your equipment (th default is for Pioneer equipment).

Checking Preset Code (VSX-D509S/D509S-G)

To check which preset code is associated with a MULTI CONTROL button:



1 Press SETUP and hold for three seconds.

The LED on the remote will blink twice.

2 Press the MULTI CONTROL button you want to check the preset code for.

3 Press ⑨, ⑨ then ⓪.

Each preset code consists of four digits, for example 1329. Each dig will be represented by a series of blinks on the remote's LED—3 blinks to represent the digit "3", etc.

4 Press ①.

The blinking LED indicates the left-most digit of the preset code ("1" in the example above).

5 Press ②.

The blinking LED indicates the next digit of the preset code ("3" in the example above).

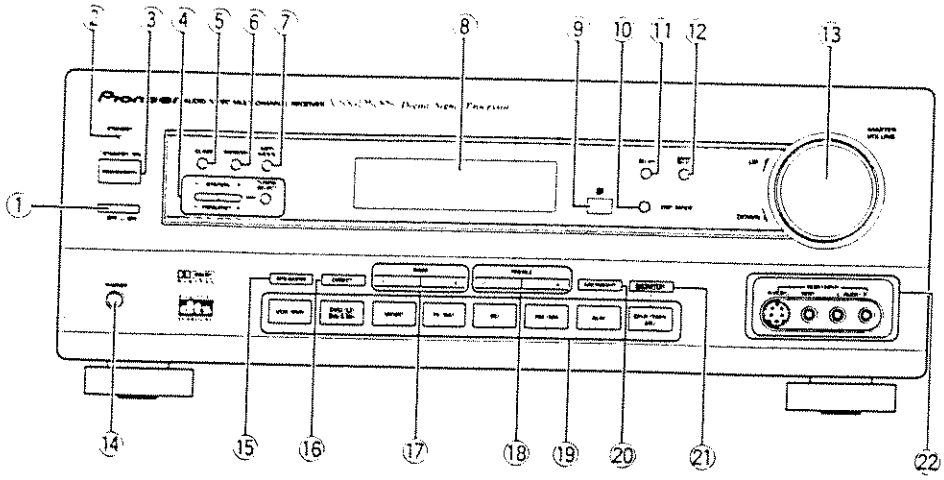
6 Press ③.

The blinking LED indicates the next digit of the preset code ("2" in the example above).

7 Press ④.

The blinking LED indicates the right-most digit of the preset code ("9" in the example above).

Front Panel



This illustration shows the VSX-D509S/D509S-G model.

① Main power button
Press to turn on the receiver. Note the STANDBY/ON button below actually turns the receiver on and standby.

② STANDBY indicator
Lights when the receiver is in standby mode (note that the receiver consumes a small amount of power (1 W) in standby mode).

③ ⏻ STANDBY/ON button
Switches the receiver between on and standby (note that the receiver consumes a small amount of power (1W) in standby mode).

④ STATION (+/–), FREQUENCY (+/–), TUNING SELECT buttons (see pages 41-43)
STATION (+/–)
Selects station memories when using the tuner.
FREQUENCY (+/–)
Selects the frequency when using the tuner.
TUNING SELECT
Switches between station memory and frequency select modes.

⑤ CLASS button (see pages 42-43)
Switches between the three banks (classes) of station memories.

⑥ MEMORY button (see page 42)
Press to memorize a station for recall using the STATION (+/–) buttons.

⑦ MPX button (see page 41)
If the **TUNED** or **STEREO** indicators don't light when tuning to an FM station because the signal is weak, press the MPX button to switch the receiver into mono reception mode. This should improve the sound quality and allow you to enjoy the broadcast.

⑧ Display (see page 34)

⑨ Remote sensor
Receives the signals from the remote control.

⑩ DSP MODE button (see page 38)
Use to switch between the various DSP modes available (**HALL1, HALL 2, JAZZ, DANCE, THEATER1, THEATER 2**) and **DSP off**. Use to create different surround sound effects from any stereo source.

⑪ DD /DTS button (see pages 37, 40)
Use to switch between the various Dolby/DTS surround modes.

⑫ SIGNAL SELECT button (see page 36)
Use to select between an analog or digital signal.

⑬ MASTER VOLUME
Use to set the overall listening volume.

⑭ PHONES jack
Use to connect headphones but this does not switch the speakers off.

⑮ SPEAKER button
Use to switch the speaker system A → B → A+B → off.

⑯ DIRECT button
Use to switch DIRECT playback on or off. This mode bypasses the tone controls and channel levels for the most accurate reproduction of a program source.

⑰ BASS (+/–) buttons
Use to increase/decrease bass (within a range of –6dB to 6dB in 2dB steps).

⑱ TREBLE (+/–) buttons
Use to increase/decrease treble (within a range of –6dB to 6dB in 2dB steps).

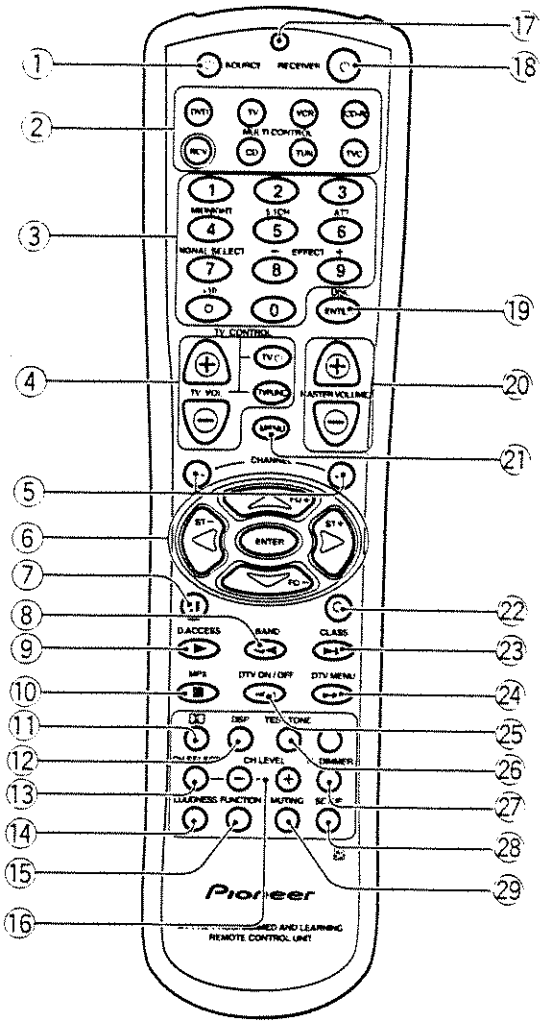
⑲ Function buttons
Use to select a source for playback or recording.

⑳ MIDNIGHT button (see page 39)
Use when listening to movie soundtracks at low volume. This feature will enable you to hear quiet sounds and not get jolted by loud or sudden sound effects.

㉑ MONITOR button
Press to switch tape monitoring on/off.

㉒ VIDEO INPUT jacks (VSX-D509S/D509S-G only)
Connect a video camera, video game system, etc. to the VIDEO INPUT jacks (refer to page 9).

Remote Control (VSX-D509S/D509S-G)



① SOURCE ⏻ button

Use to turn on/off other components connected to the receiver.

② MULTI CONTROL buttons

Use to put the receiver/remote control in the stated mode.
For other equipment controls, see "Controlling the Rest of Your System" on pages 45-49.

③ Number/Mode buttons (see pages 22, 42)

Use the number buttons to select the radio frequency in tuner Direct access mode or the tracks in CD, DVD mode etc.

Also, buttons marked with the following names have special functions. If you try to use one of these functions but the display flashes it means that function cannot be used in the current mode (for example DSP modes cannot be used when 5.1 CH setting is on).

MIDNIGHT (see page 39)
Use to put receiver in Midnight mode. To u
first press the RCV button then operate th
button.

5.1 CH (see page 38)
When the DVD/LD or DVD 5.1 CH function
selected each press switches the DVD/LD
between DVD/LD and DVD 5.1 CH. To use
press the RCV button then operate this but

ATT
Use to attenunate (lower) the level of an ar
input signal and prevent distortion (refer to
⑫). To use first press the RCV button then
operate this button.

SIGNAL SELECT (see page 36)
Use to select the proper signal (analog, dig
for the source you are inputting. To use firs
press the RCV button then operate this but

EFFECT +/– buttons
Use to add or subtract the amount of effec
different DSP sound modes or advanced
listening modes. To use first press the RCV
button then operate this button.

④ **The following three sets of buttons are dedicated TV control. They are only used for controlling your TV.**

TV VOL +/– buttons
Use to adjust the volume on your TV.

TV ⏻ button
Use to turn on the power of the TV.

TV FUNC button
Use select the TV function.

⑤ **CHANNEL +/– buttons**
Use to change the channels on your TV.

⑥ **◄ ► ▲ ▼ (FQ +/–, ST +/–) & ENTER buttons (see pages 15-20, 41)**
Use these arrow buttons when setting up your surround sound system (see pages 15-20). These buttons are also used to control DVD menus/options. The FQ +/– buttons can be used to find radio frequencies. The ST +/– buttons can be used to select the stations of memorized radio frequencies.

⑦ **II button**
Use to pause other components.

⑧ **◄◄ button (BAND)**
Use to fast reverse search on CDs etc. Also use to switch between the AM and FM band when in TUNER mode.

⑨ **► button (D. ACCESS)**
Use to play other components. Also use to directly access a radio station by pressing the number of the station you want.

⑩ **■ button (MPX)**
Use to stop other components. Also use to switch between auto stereo and mono reception of FM broadcasts. If the signal is weak then switching to MONO will improve the sound quality.

⑪ **DD button**
Use to put receiver in Dolby Digital, Dolby Surround and DTS modes. To use first press the RCV button then operate this button.

⑫ **DSP button**
Use to put receiver in one of the DSP modes. To use first press the RCV button then operate this button.

⑬ **CH SELECT**
Use to select a speaker when setting up the surround sound of the receiver. To use first press the RCV button then operate this button.

⑭ **LOUDNESS button**
Use to switch on the loudness. This feature is useful for getting good bass and treble sounds listening at low volumes.

⑮ **FUNCTION button**
Use to select the playback or recording source. This button lets you cycle through the different functions of the receiver in the following order: CD, TUNER, AUX, CD-R/TAPE/MD, VCR/DVR, DVD/LD, VIDEO and TV/SAT.

⑯ **CHANNEL LEVEL +/– buttons**
Use to adjust the output level of the selected channel(s).

⑰ **LED DISPLAY**
This display flashes when a command is sent from the remote control to the receiver. It also flashes at other times, for example when teaching the receiver preset codes, with specific meanings.

⑱ **RECEIVER ⏻ button (see page 15)**
This switches between STANDBY mode and power ON for this receiver.

⑲ **ENTER button (DISC)**
Use for controlling other components only.

⑳ **MASTER VOLUME +/– buttons**
Use to set the overall listening volume.

㉑ **MENU button**
Use to access different menus associated with your DVD player.

㉒ **● button**
Use to record with other components.

㉓ **►► button (CLASS)**
Use to fast forward search on CDs etc. Also use the CLASS feature to switch between the three banks (classes) of station memories.

㉔ **►►I button (DTV MENU)**
Use to skip forward tracks on CD players etc. Also use to access DTV menus.

㉕ **I◄◄ button (DTV ON/OFF)**
Use to skip reverse tracks on CD players etc. Also use to turn DTV on/off.

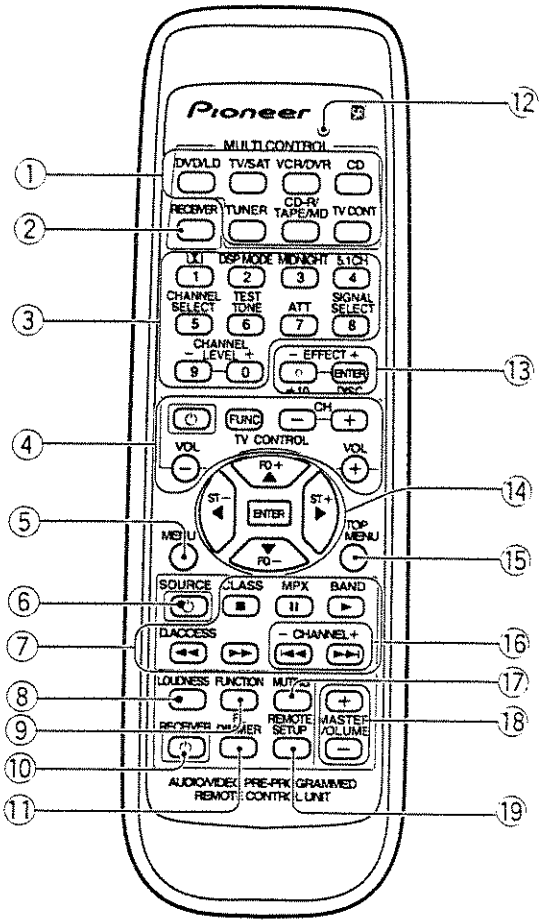
㉖ **TEST TONE**
Use to sound the TEST TONE when setting up the surround sound of the receiver. To use first press the RCV button then operate this button.

㉗ **FL DIMMER button**
Use this button to make the fluorescent display (FL) dimmer or brighter. There are three brightness settings as well as an off setting.

㉘ **SETUP button (see pages 26, 28)**
Use this button when setting up the remote control to control other components.

㉙ **MUTING button**
Use to mute the sound or restore the sound if it has been muted.

Remote Control (VSX-D409/D409-G)



① MULTI CONTROL buttons

Use to put the receiver/remote control in the stated mode.
For other equipment controls, see "Controlling the Rest of Your System" on pages 45-49.

② RECEIVER button (see page 15)

Use this button when setting up the surround sound for the receiver.

③ Number/Mode buttons (see pages 22, 42)

Use the number buttons to select the radio frequency in tuner DIRECT ACCESS mode or the tracks in CD, DVD mode etc.

Also, buttons marked with the following names have special functions. If you try to use one of these functions but the display flashes it means that function cannot be used in the current mode (for example DSP modes cannot be used when 5.1 CH setting is on).

DD (see pages 37, 40)
Use to put receiver in Dolby Digital, Dolby Surround and DTS modes. To use first press the RECEIVER button then operate this button.

DSP MODE (see pages 38)
Use to put receiver in one of the DSP mode use first press the RECEIVER button then operate this button.

MIDNIGHT (see page 39)
Use to put receiver in Midnight mode. To us first press the RECEIVER button then opera this button.

5.1 CH (see page 39)
When the DVD/LD or DVD 5.1 CH function selected each press switches the DVD/LD i between DVD/LD and DVD 5.1 CH. To use press the RECEIVER button then operate th button.

CHANNEL SELECT (see page 21-note)
Use to select a speaker when setting up the surround sound of the receiver. To use first press the RECEIVER button then operate th button.

TEST TONE (see page 21)
Use to sound the TEST TONE when setting the surround sound of the receiver. To use f press the RECEIVER button then operate th button.

ATT
Use to attenuate (lower) the level of an analog input signal and prevent distortion (refer to p.34 12). To use first press the RECEIVER button then operate this button.

CHANNEL LEVEL +/– (see page 21-note)
Use to set up the levels of the surround sound of the receiver. To use first press the RECEIVER button then operate this button.

SIGNAL SELECT (see page 36)
Use to select the proper signal (analog, digital) for the source you are inputting. To use first press the RECEIVER button then operate this button.

④ The following four sets of buttons are dedicated TV control. They are only used for controlling your TV.

FUNC button
Use select the TV function.

TV POWER button
Use to turn on the power of the TV.

TV CHANNEL +/– buttons
Use to change channels on your TV.

TV VOLUME +/– buttons
Use to adjust the volume on your TV.

⑤ MENU button
Use to access different menus associated with your DVD player.

⑥ SOURCE button
Use to turn on/off other components connected to the receiver.

⑦ The following buttons are both controls for other components (like a DVD player) and dedicated tuner controls. The tuner controls are explained here. You can use them after you have pushed the TUNER MULTI CONTROL button.

CLASS button (see pages 42, 43)
Use to switch between the three banks (classes) of station memories.

MPX button (see page 41)
Use to switch between auto stereo and mono reception of FM broadcasts. If the signal is weak then switching to MONO will improve the sound quality. Also, this is the pause button for CDs, tapes, DVDs, etc.

BAND button (see pages 41, 42)
Use to switch between the AM and FM band when in TUNER mode.

D. ACCESS button (see page 42)
Use to directly access a radio station by pressing the number of the station you want.

⑧ LOUDNESS button
Use to switch on the loudness. This feature is useful for getting good bass and treble sounds listening at low volumes.

⑨ FUNCTION button
Use select the playback or recording source. This button lets you cycle through the different functions of the receiver in the following order: CD, TUNER, AUX, CDR/TAPE/MD, VCR/DVR, DVD/LD, DVD 5.1 CH., and TV/SAT.

⑩ RECEIVER ⏻ (POWER) button
This switches between STANDBY mode and power ON for this receiver.

⑪ FL DIMMER button
Use this button to make the fluorescent display (FL) dimmer or brighter. There are three brightness settings as well as an off setting.

⑫ LED display (see pages 23-24)
This display flashes when a command is sent from the remote control to the receiver. It also flashes at other times, for example when teaching the receiver preset codes, with specific meanings.

⑬ EFFECT +/– buttons (see page 40-note)
Use to add or subtract the amount of effect in different DSP sound modes or advanced listening modes.

⑭ ◄ ► ▲ ▼ (FQ +/–, ST +/–) & ENTER buttons (see pages 15-20, 41)
Use these arrow buttons when setting up your surround sound system (see pages 15-20). These buttons are also used to control DVD menus/options and for deck 1 of a double cassette deck player. The FQ +/– buttons can be used to find radio frequencies. The ST +/– buttons can be used to select the stations of memorized radio frequencies.

⑮ TOP MENU button
In DVD mode this button brings you to the top or most fundamental menu.

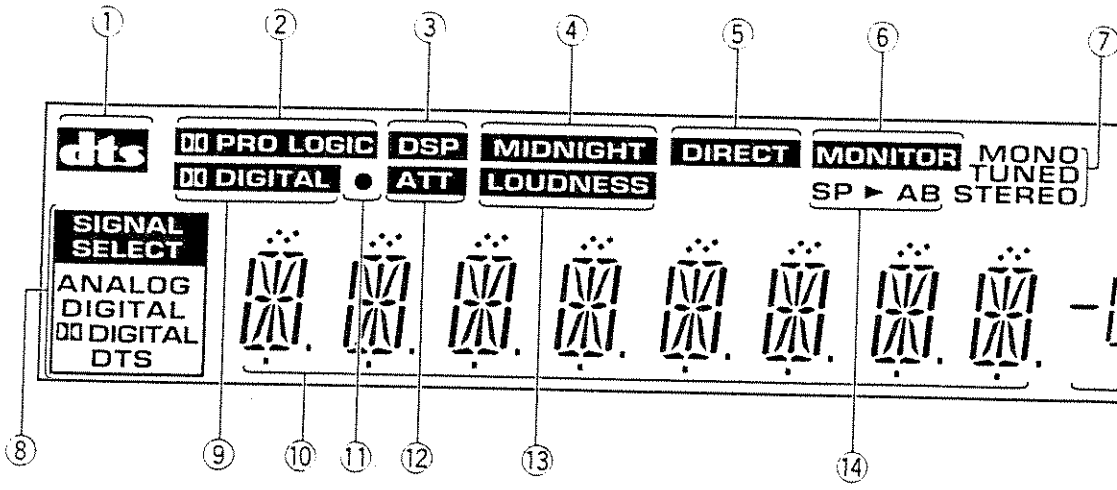
⑯ CHANNEL +/– buttons
Use to select the stations of memorized radio frequencies. Also use to skip tracks backward or forward on CDs, DVDs, etc.

⑰ MUTING button
Use to mute the sound or restore the sound if it has been muted.

⑱ MASTER VOLUME +/– buttons
Use to set the overall listening volume.

⑲ REMOTE SETUP button (see page 23)
Use this button when setting up the remote control to control other components.

Display



① DTS indicator

Lights when DTS mode is being used.

② PRO LOGIC indicator

When the (Dolby)/DTS mode of the receiver is on, this lights to indicate playback of a two channel source.

③ DSP indicator

Lights when any Advanced Theater or DSP mode is selected.

④ MIDNIGHT indicator

Lights when Midnight listening mode is in use.

⑤ DIRECT indicator

Lights when source DIRECT is in use. This function bypasses all tone, balance, DSP and Dolby Surround effects.

⑥ MONITOR indicator

Lights when **MONITOR** is selected to hear a recording as it's being made (see page 44).

⑦ Tuner indicators

MONO:
Lights when the mono mode is set using the MPX button.

TUNED:
Lights when a broadcast is being received.

STEREO:
Lights when a stereo FM broadcast is being received in auto stereo mode.

⑧ SIGNAL SELECT indicators

Light to indicate the type of input signal assigned for the current component (see "Front Panel", ⑫, SIGNAL SELECT).
ANALOG : Lights when an analog signal is selected.
DIGITAL : Lights when a digital audio signal is selected.
DIGITAL : Lights when a Dolby Digital signal is played.
DTS : Lights when a source with DTS audio signals is played.

⑨ DIGITAL indicator

When the (Dolby)/DTS mode of the
on, this lights to indicate playback of a
Digital signal. However, PRO LOGI
during 2 channel playback of Dolby Digi

⑩ Character display

Shows the radio frequency or function
CD, etc.) receiver is using .

⑪ • Overload indicator

This lights when an analog signal is too
SIGNAL SELECT needs to be on ANALO
indicates the sound is distorting and the
should be reduced.

⑫ ATT indicator

Lights when ATT is used to attenuate (re
level of the input signal (can only be use
ANALOG mode).

⑬ LOUDNESS indicator

Lights when the LOUDNESS, used to bo
bass and treble in quiet listening, is on.

⑭ SP ► AB (speakers) indicator

Shows if the speaker system is on or no
and/or B means speakers are switched o
means speakers are switched off.

⑮ Master volume level

Shows the overall volume level. Volume
maintained even when the power is off.
indicates the minimum level, and 0dB inc
the maximum level.

- Depending on the level settings you m
individual channels, the MAX level can
between –10dB and 0dB.

Learning about the Sound Modes

The sound modes are explained here.

There are two cinema modes: STANDARD, and ADVANCED THEATER. These are designed to be used with multi channel surround sound audio/visual sources (like DVDs and LDs). Intrinsic to home theater, these modes can deliver realistic and powerful surround sound that recreates the movie theater experience. You may need to experiment with them to see which settings suit your home system and personal tastes.
The DSP and STEREO modes are designed to be used with music sources but some DSP modes are also suited for film soundtracks. Again, try different settings with various soundtracks to see which you like.

STANDARD mode

This mode is for pure decoding of Dolby Digital, DTS and Dolby Surround. No special effects are added. It is good for enjoying movies that have been recorded in Dolby Digital, DTS or Dolby Surround.
You can identify Dolby Digital software by the DOLBY DIGITAL or DOLBY SURROUND AC-3 marks. Most Dolby Surround software is marked DOLBY SURROUND, but unmarked software may also incorporate Dolby Surround.

ADVANCED THEATER modes

MUSICAL

Simulates the acoustic environment of a large concert hall and is suitable for music or musical sources marked DOLBY DIGITAL (DOLBY SURROUND AC-3) or DTS.

DRAMA

Simulates the relaxed environment of a classic medium size movie theater, and is suitable for watching dramas on sources marked DOLBY DIGITAL (DOLBY SURROUND AC-3) or DTS.

ACTION

Simulates the acoustic environment of a modern large movie theater. You can enjoy the power and dynamics of motion picture audio which is suitable for action movies on sources marked DOLBY DIGITAL, DOLBY SURROUND AC-3 or DTS.

EXPANDED

This mode is especially designed to give sound depth to stereo and Dolby Surround sources. The overall effect builds a dynamic and broad sound space, allowing two-channel (stereo) signals and Dolby Surround to faithfully imitate a five speaker sound. You can also use with Dolby Digital sources for a wider stereo field than STANDARD mode.

DSP modes

The DSP (Digital Signal Processing) modes allow you to transform your living room into a variety of different sonic environments when playing standard (two-channel) stereo sources, Dolby Pro Logic sources, and Dolby Digital sources. If you try to add this effect to functions which can not use it "SP off" flashes in the display.

HALL 1

Simulates the acoustic environment of a large concert hall of wooden construction. Complex delay of reflected sounds coupled with reverberation effects create a dynamic and beautiful sound characteristic of an orchestra performing in a concert hall, making it suitable for classical music.

HALL 2

Simulates the acoustic environment of a concert hall with stone walls. The rich reverberations and natural fullness of the sound create the auditory impression of being in a concert hall, making it suitable for classical music.

JAZZ

Simulates the acoustic environment of a jazz club. Less delay on the reflected sounds emphasizes the sensation of hearing a live band.

DANCE

Simulates the acoustic environment and strong bass sound of a nightclub with a square dance floor. A short delay on the reflected sounds emulates the raw power of the dance music.

THEATER 1

Adjusts the delay of the reflected sound to simulate the acoustic environment of a medium sized movie theater.

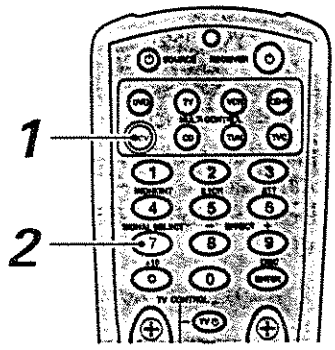
THEATER 2

Simulates the acoustic environment of a theater while maintaining proper localization of each channel.

Switching ANALOG/DIGITAL Signal Input

When you select a function (for example, CD) that is only hooked up by a digital connection, then the ANAL DIGITAL signal input switch will automatically choose digital. If you have that function hooked up by both d and analog connections this switch lets you choose which to listen to.

VSX-D509S/D509S-G



1 Press RCV.

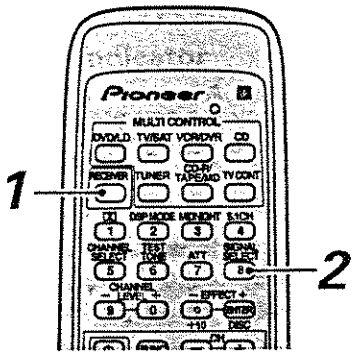
This switches the remote to the surround setup mode. (On the D409/D409-G the button is called RECEIVER.)

2 Press SIGNAL SELECT to select the input signal corresponding to the source component.

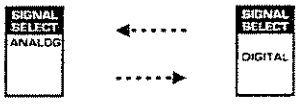
Each press switches between ANALOG and DIGITAL signal sele tion.

3 While SIGNAL SELECT is set to DIGITAL, DI DIGITAL lights when a Dolby Digital signal input, DTS lights when a DTS signal is inpu

VSX-D409/D409-G



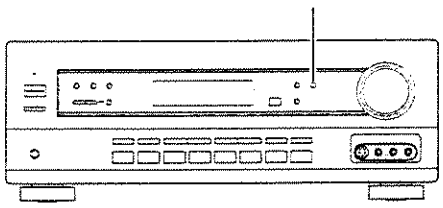
Each press switches between ANALOG and DIGITAL signal selection.



When a Dolby Digital signal is input.

When a DTS signal is input.

SIGNAL SELECT

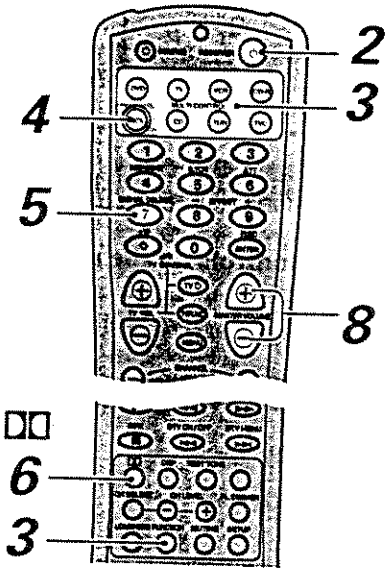


memo

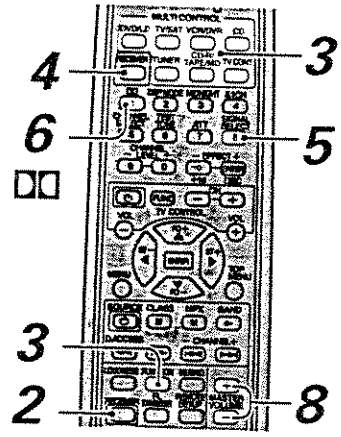
- SIGNAL SELECT is fixed in the "ANALOG" position for compone not assigned to one of the two digital input jacks.
- This receiver can only play back Dolby Digital, PCM (32kHz, 44kH and 48kHz), DTS, digital signal formats. With digital signal forma other than these, set SIGNAL SELECT to "ANALOG".
- When an LD or CD player compatible with DTS is played back w SIGNAL SELECT set in "ANALOG", digital noise is output cause playing back the DTS directly (no decoding). To prevent noise, yo need to make digital connections (Refer to page 10) and set SIG SELECT to "DIGITAL".
- Some DVD players don't output DTS signals. For more details, re to the instruction manual supplied with your DVD player.

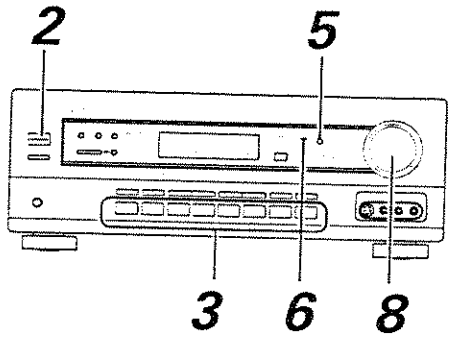
Playing Sources with Dolby Digital or DTS Sound

VSX-D509S/D509S-G



VSX-D409/D409-G





1 **Turn on the power of the playback component.**

2 **Turn on the power of the receiver.**

Be sure that the standby indicator turns off on the front panel.

3 **Press MULTI CONTROL buttons or the FUNCTION button to select the source you want to playback.**

If the Direct Function is OFF you have to use the FUNCTION button to select the source (see p. 27).

4 **Press RCV.**

The set the remote to select the sound mode. (On the VSX-D409/D409-G the button is called RECEIVER.)

5 **Press SIGNAL SELECT to select DIGITAL.**

(Refer to "Switching ANALOG/DIGITAL signal input" on the page 36.)

6 **Press DD to switch the Dolby/DTS mode on.**

7 **Start playback of the component you selected in step 1.**

8 **Press MASTER VOLUME (+/–) to adjust the volume level.**

memo

- When an LD or CD player compatible with DTS is played back with SIGNAL SELECT set in "ANALOG", digital noise is output caused by playing back the DTS directly (no decoding). To prevent noise, you need to make digital connections (Refer to page 11) and set SIGNAL SELECT to "DIGITAL".

memo

When playing LD recorded in Dolby Digital

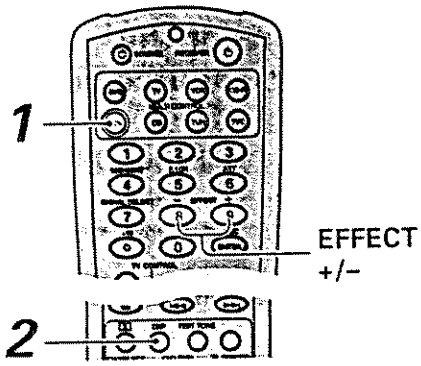
When connecting a DVD/LD player or LD player using the DD RF output, a commercially available RF demodulator (RFD-1) is required. The RF demodulator changes the RF signal to a digital signal which is then processed by the receiver at the digital input jacks. For more details, refer to the instruction manual supplied with the RFD-1.

Selecting a Sound Mode

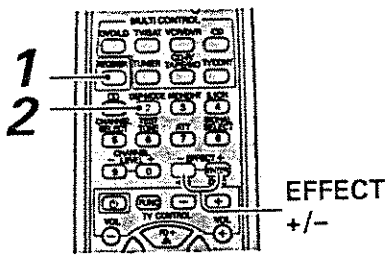
To ensure the best possible surround sound, be sure to complete the set up procedures described in "Settin Up for Surround Sound" (starting on page 15) before using the sound modes. This is particularly important w using the DD (Dolby) surround mode.

Surround operation

VSX-D509S/D509S-G



VSX-D409/D409-G



1 Press RCV.

This sets the remote to select the sound mode. (On the VSX-D40 D409-G the button is called RECEIVER.)
(You can skip this step when using the controls on the receiv

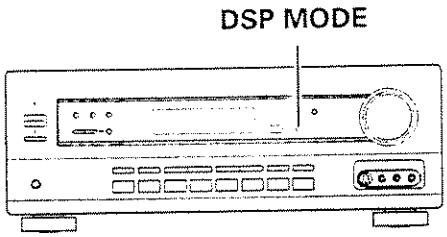
2 Press DSP MODE to select the sound mode.

Each press changes the DSP mode as follows:

HALL 1 → HALL 2 → JAZZ → DANCE
(OFF) ← THEATER 2 ← THEATER 1

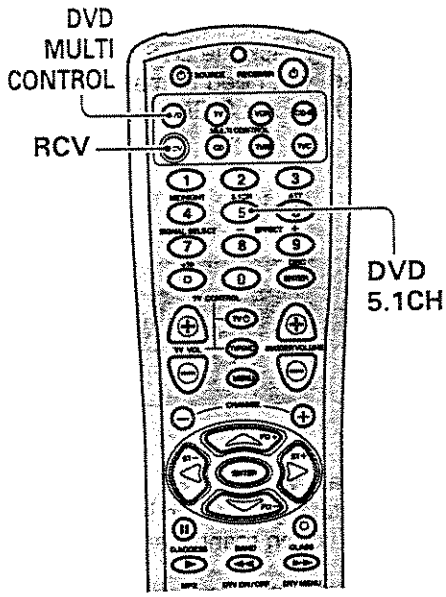
memo

The amount of effect of each DSP mode can be adjusted the range of 10 to 90 (the default setting value is 70) by pressing EFFECT +/–.



DVD 5.1 ch. input playback (VSX-D509S/D509S-G)

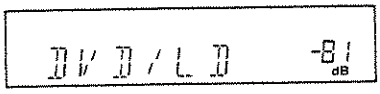
Connect a component with 5.1 channel output to enjoy the surround sound created by 5.1 channel playback



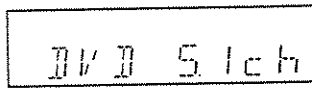
There are two ways to switch on DVD 5.1 CH mode. With the remote control press the DVD LD MULTI CONTROL button. Then press the R button and number button 5 (DVD 5.1CH). On the main unit simply press the DVD button.

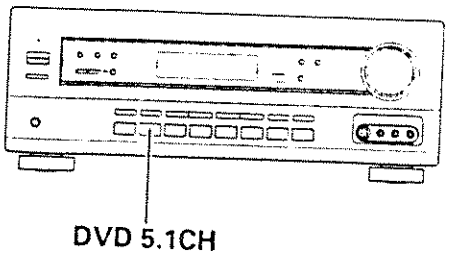
Press number button 5 (DVD 5.1CH) on the remote to go back to the DVD mode control. exit this mode using the main unit simply pre other function button (DVD/LD, etc.).

Each press switches the input: DVD/LD ⇔ DVD 5.1ch



⇔



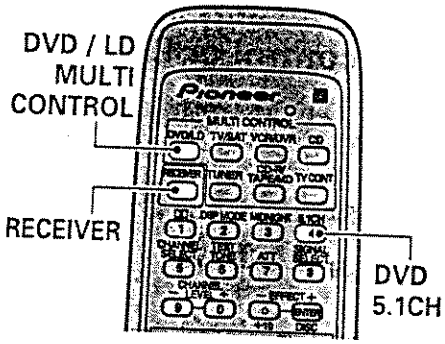


memo

- When 5.1 ch input is selected, Dolby mode, DSP mode, SIGNAL SELECT, ATT, DIRECT, TONE, MIDNIGHT mode, LOUDNESS and speakers B cannot be operated.
- When 5.1ch input is selected, only the volume level and channel levels can be set.

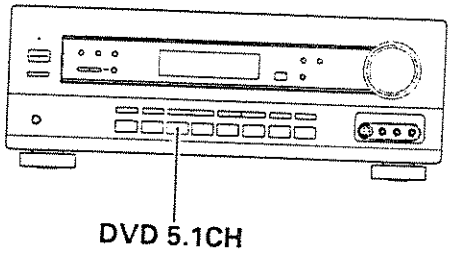
DVD 5.1 ch. input playback (VSX-D409/D409-G)

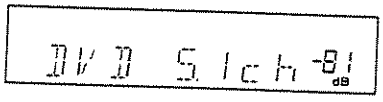
Connect a DVD player with 5.1 channel output to enjoy the surround sound created by 5.1 channel playback.



There are two ways to switch on DVD 5.1 CH mode. With the remote control press the DVD/LD MULTI CONTROL button. Then press the RECEIVER button and number button 4 (DVD 5.1CH). On the main unit simply press the DVD 5.1CH button.

Press number button 4 (DVD 5.1CH) on the remote to go back to the DVD/LD mode control. To exit this mode using the main unit simply press other function button (DVD/LD, etc.).



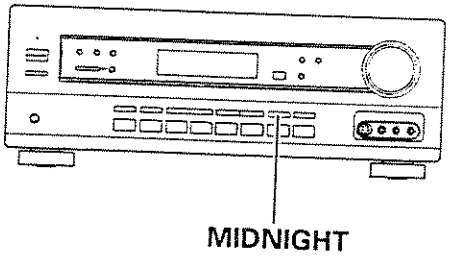


memo

- When 5.1 ch input is selected, Dolby mode, DSP mode, SIGNAL SELECT, ATT, DIRECT, TONE, MIDNIGHT mode and LOUDNESS cannot be operated.
- When 5.1ch input is selected, only the volume level and channel levels can be set.

Using in MIDNIGHT Listening Mode

When the volume is low, surround effects tend to become less than satisfactory. Turn the MIDNIGHT listening mode on to enjoy the effects of quality surround sound even at low volumes. This mode allows you to hear effective surround sound of movies at low volume levels.



Press MIDNIGHT.

Each press switches MIDNIGHT listening mode on or off.

memo

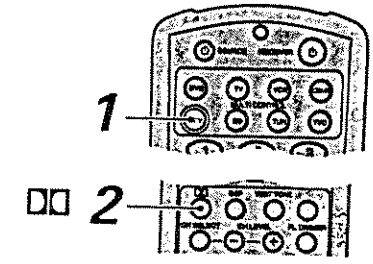
The effect automatically adjusts according to the volume level.

ADVANCED THEATER mode (Dolby/DTS mode)

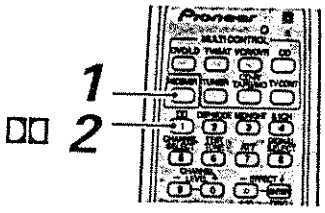
Switch on the Dolby/DTS mode by pressing the ◻◻ surround button. When Dolby/DTS mode is ON, Logic, Dolby Digital and DTS, and signal processing is performed automatically corresponding to the Use this button to cycle through the various modes.

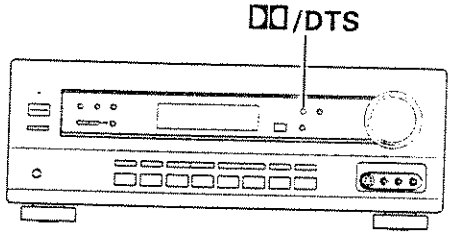
For all modes other than STANDARD, DSP is switched on and will appears in the display.

VSX-D509S/D509S-G



VSX-D409/D409-G





1 Press RCV.

This sets the remote to select the sound mode. (On the V D409-G the button is called RECEIVER.)
(You can skip this step when using the controls on the

2 Switch the Dolby/DTS mode on and off pressing ◻◻ on the remote control or ◻◻ on the front panel.

Each press changes the display as follows.

STANDARD → MUSICAL → DRAMA → ACTION → EXPANDED → (OFF) → STANDARD

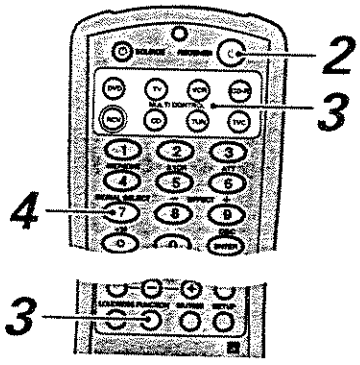
Refer to page 35 for more details about each surround effe

memo

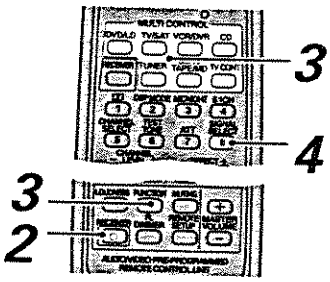
- The effects of Dolby/DTS mode can be adjusted in range of 10 to 90 by pressing EFFECT +/– (the def setting is 70). Also, the effect level can be set in e Dolby/DTS mode by pressing the EFFECT +/– butt STANDARD mode cannot be changed.

Playing a Source

VSX-D509S/D509S-G



VSX-D409/D409-G



1 Turn on the power of the playback component.

2 Turn on the power of the receiver.

Be sure that the standby indicator turns off on the front pane

3 Press MULTI CONTROL buttons or the FUNCTION button to select the source yo want to playback.

If the Direct Function is OFF you have to use the FUNCTION to select the source (see p.28).

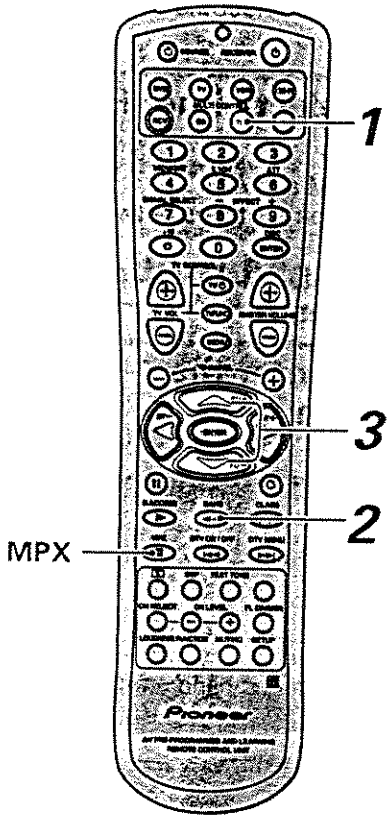
4 If necessary, press SIGNAL SELECT to sel the input signal corresponding to the sou component (as above).

5 Start playback of the component you sele in step 1.

Finding a Station

The following steps show you how to tune in to FM and AM radio broadcasts using the automatic (search) and manual (step) tuning functions. If you already know the exact frequency of the station you want to listen to, see Tuning Directly to a Station on the following page. Once you are tuned to a station you can memorize the frequency for recall later—see Memorizing Stations on page 42 for more on how to do this.

VSX-D509S/D509S-G



1 Press the MULTI CONTROL TUN button.

On the receiver, press the **FM/AM** button to select the tuner mode.

2 Use the BAND button to change the band (FM or AM), if necessary.

Each press switches the band between FM and AM (on the front panel use the FM/AM button).

3 Tune to a station.

Automatic tuning

To search for stations in the currently selected band, press and hold either the **FQ +** or **FQ –** button for about a second. The receiver will start searching for the next station, stopping when it has found one. Repeat this step to search for other stations.

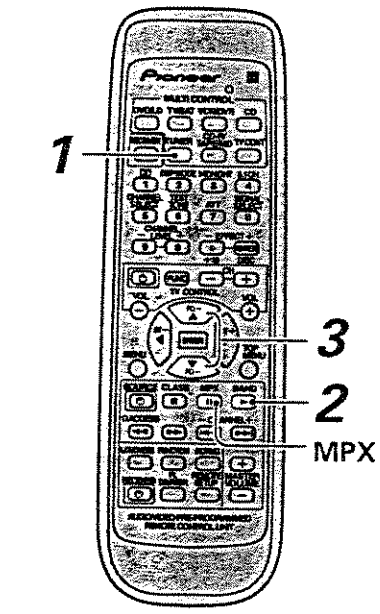
Manual tuning

To change the frequency one step at a time, press the **FQ +** / **FQ –** (▲▼) buttons.

High speed tuning

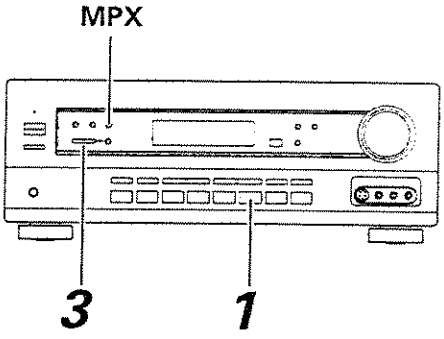
Press and hold the **FQ +** or **FQ –** button for high speed tuning, releasing the button once the desired frequency is reached.

VSX-D409/D409-G



MPX mode

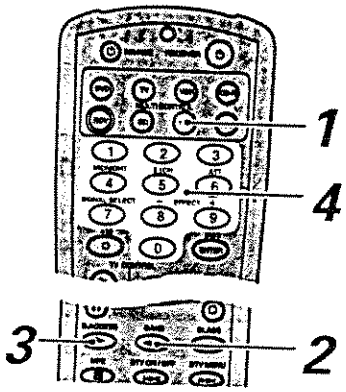
If the **TUNED** or **STEREO** indicators don't light when tuning to an FM station because the signal is weak, press the MPX button to switch the receiver into mono reception mode. This should improve the sound quality and allow you to enjoy the broadcast.



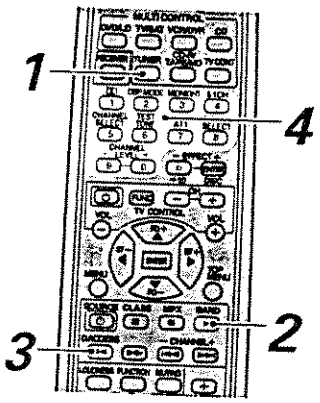
Tuning Directly to a Station

Sometimes, you'll already know the frequency of the station you want to listen to. In this case, you ca enter the frequency directly using the number buttons on the remote control (this function is not avail the front panel controls of the receiver).

VSX-D509S/D509S-G



VSX-D409/D409-G



1 Press the MULTI CONTROL TUN butto

On the receiver, press the **FM/AM** button to select the tu mode.

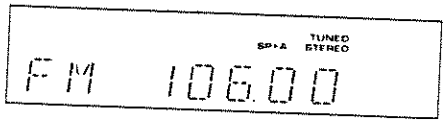
2 Press the BAND button to select either AM.

Each press switches the band between FM and AM.
On the receiver, pressing the FM/AM button switches bet bands.

3 Press D.ACCESS (Direct Access).

4 Use the number buttons to enter the frequency of the radio station.

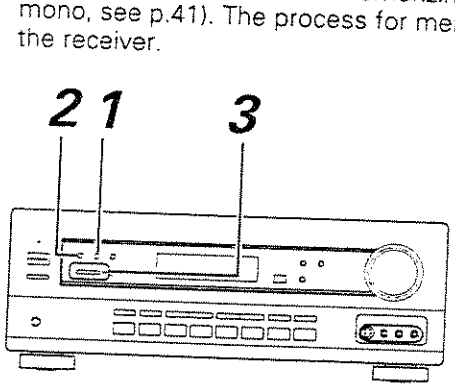
Example:
To tune to 106.00 (FM), press **1 – 0 – 6 – 0 – 0**



If you make a mistake while inputting the frequency, press t **D. ACCESS** button twice to cancel the frequency and start a

Memorizing Stations

If you often listen to a particular radio station, it's convenient to have the receiver store the frequency for e recall whenever you want to listen to that station. This saves the effort of manually tuning in each time. Th VSX-D409/D409-G/509S/509S-G can memorize up to 30 stations, stored in three banks, or classes, (A,B ar of 10 stations each. When memorizing FM frequencies, the receiver also stores the MPX setting (auto ste mono, see p.41). The process for memorizing stations is only possible from the controls on the front panel the receiver.

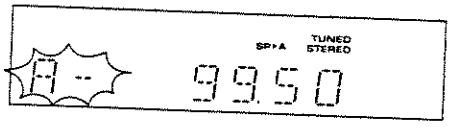


1 Tune to a station you want to memorize.

See "Finding a Station" and "Tuning Directly" to a Station, on 41 and this page, for more on how to do this.

2 Press MEMORY.

The display shows a blinking memory class.



(continues on next p

3 Press CLASS to select one of the three classes.

Repeatedly pressing this button cycles through the three available classes, A, B and C.

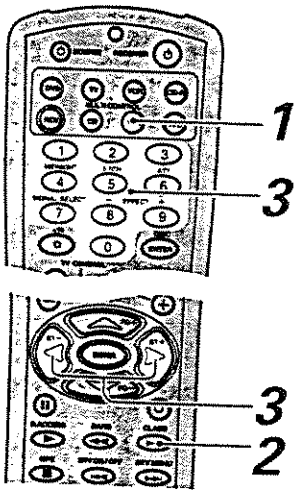
4 Press STATION +/– to select the desired station memory number.

Pressing these buttons repeatedly cycles through the 10 available station memories in each class.
After choosing the location you want, the preset class and number blink for about 5 seconds and the receiver stores the station.
Repeat steps 1 to 4 to memorize up to 30 stations.

Recalling Memorized Stations

Having memorized up to 30 stations (see the previous page for how to do this), you can be listening to a station with a couple of button presses.

VSX-D509S/D509S-G



1 Press the MULTI CONTROL TUN button.

On the receiver, press the **FM/AM** button to select the tuner mode.

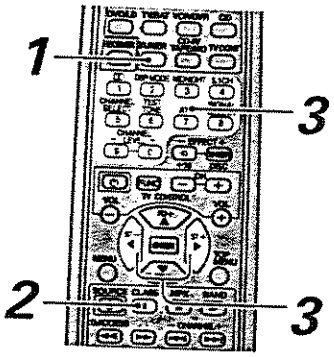
2 Press CLASS to select the class in which the station is stored.

Repeatedly pressing this button cycles through the three available classes, A, B and C.

3 Use the ST +/– buttons to select the station memory in which the station is stored.

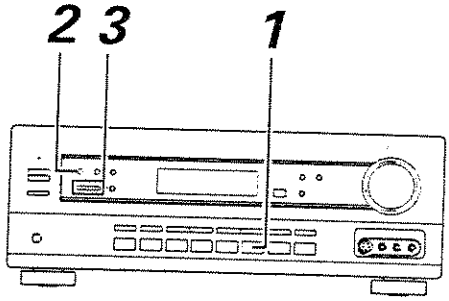
Alternatively, recall the station memory using the number buttons on the remote control.

VSX-D409/D409-G



memo

If the receiver is left disconnected from the AC power outlet for a lengthy period, the station memories will be lost and will have to be reprogrammed.

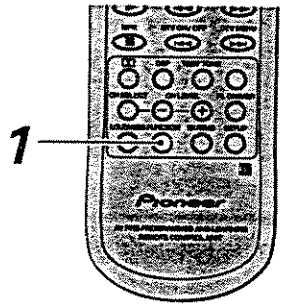


Making an Audio or a Video Recording

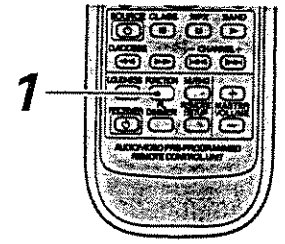
The following steps show you how to make an audio or a video recording from the built in tuner, or from an audio or video source connected to the receiver (such as a CD player or TV). Recordings can be made to a CD-Recorder, cassette deck, MD, VCR, or DVR deck connected to the CD-R/TAPE/MD, VCR or DVR in/out connectors.

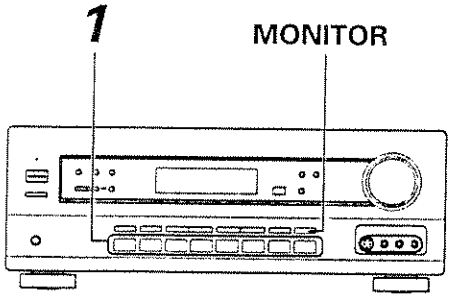
memo The receiver's volume, balance tone (bass, treble, loudness), and surround effects have no effect on the recorded signal.

VSX-D509S/D509S-G



VSX-D409/D409-G





1 Press the FUNCTION button to select a source to record (you can also use the MULTI CONTROL buttons if the DIRECT FUNCTION is on).

All functions except MONITOR are accessible from the remote control.
On the receiver, select the source directly using the front panel buttons.

2 Prepare the program source.

Tune to the radio station, load the CD, etc. For a video recording load the video, DVD etc.

3 Insert a blank tape, MD, video etc. into the recording device connected to either CD-R/MD/TAPE or VCR/DVR and set the recording levels.

Refer to the instructions that came with the recorder if you are unsure how to do this. Most video recorders set the audio recording level automatically—check your video's instruction manual if you are unsure whether yours has manual controls.

4 Start recording, then start playback of the source component.

Record MONITOR

You can listen to (monitor) the recording as it's being made using the MONITOR button on the front panel (a cassette deck would have to have a record monitor function).
Press the MONITOR button to switch between the recorded signal and the original source signal.

Making a digital recording

The VSX-D509S/D509S-G has one digital output jack. If you want to make a digital recording from this receiver hook up this optical output to the optical input on the digital component you want to record into. The source component (like MD, CD, DVD, etc.) must be digital also, of course. Make sure the analog/digital switch is set to digital (see p. 36) The recording procedure is the same as described above.

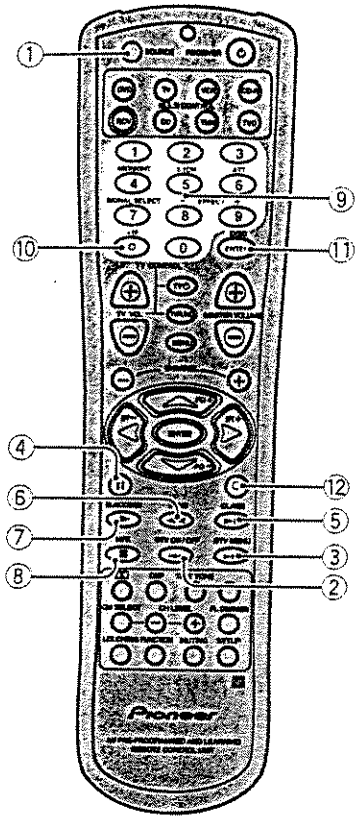
CD/MD/CD-R/VCR/LD Player Controls

memo

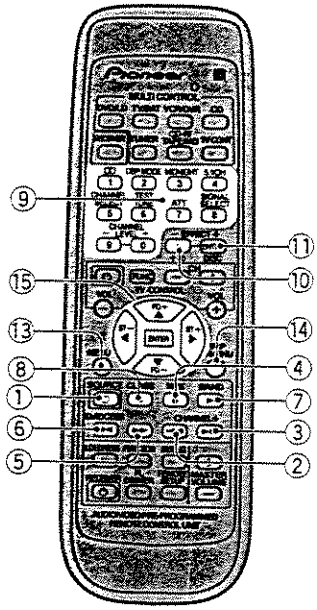
This remote control can control these components after entering the proper codes or teaching the receiver the commands (VSX-D509S/D509S-G only). (see p. 22-25)

Use MULTI CONTROL buttons to put the remote control in the stated mode.

VSX-D509S/D509S-G



VSX-D409/D409-G



① ⏻ **SOURCE**

Press to switch the CD, MD or CD-R player between **STANDBY** and **ON**.

② ⏮

Press to return to the start of the current track. Repeated presses skips to the start of previous tracks. When controlling a VCR, use this button to go back channels (channel –).

③ ⏭

Press to advance to the start of the next track. Repeated presses skips to the start of following tracks. When controlling a VCR, use this button to go forward channels (channel +).

④ ⏸

Press to pause playback.

⑤ ⏩

Hold down for fast forward playback.

⑥ ⏪

Hold down for fast reverse playback.

⑦ ▶

Press to start playback.

⑧ ■

Press to stop playback (on some models, pressing this when the disc is already stopped will cause the disc tray to open).

⑨ **Number Buttons**

Used to directly access tracks on a program source.

⑩ **+10 Button**

Use this button to select tracks higher than 10. Press this button and the remaining number to get the track (+10 Button + 3= track 13).

⑪ **ENTER (DISC) Button**

For a multiple CD player use this button to choose the disc. On an MD player use it ejects the disc, on a VCR it switches between the VDR tuner and the TV tuner. On an LD it changes sides of the LD.

⑫ ● **RECORD Button (VSX-D509S/D509S-G only)**

Use to start recording. To prevent accidental recording, this button must be pressed twice to take effect (the second press must be within 10 seconds of the first).

⑬ **MENU (VSX-D409/D409-G only)**

Press to advance to the start of the next track. Repeated presses skips to the start of following tracks.

⑭ **TOP MENU (VSX-D409/D409-G only)**

Press to return to the start of the current track. Repeated presses skips to the start of previous tracks.

⑮ **◄ ►▲▼ & ENTER buttons (VSX-D409/D409-G only)**

These buttons can be used play or stop (etc.) many components and also to navigate DVD menus/options. Specifically:

◄ to rewind or reverse program source

► to fast forward program source

▲ to pause program source

▼ to stop program source

ENTER to play program source

▲▼ pressed together to start recording (for recording devices only).

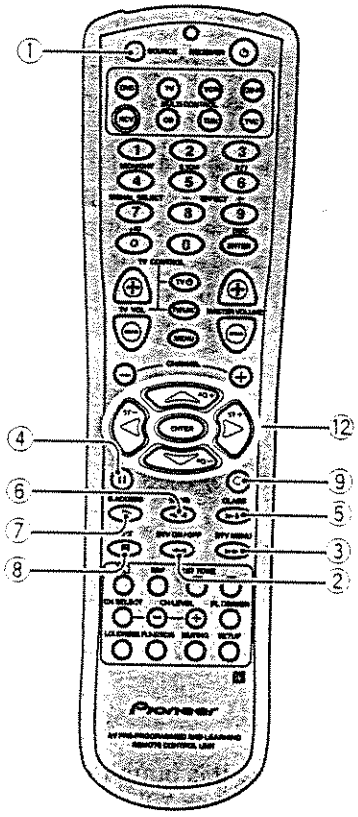
Cassette Deck Controls

memo

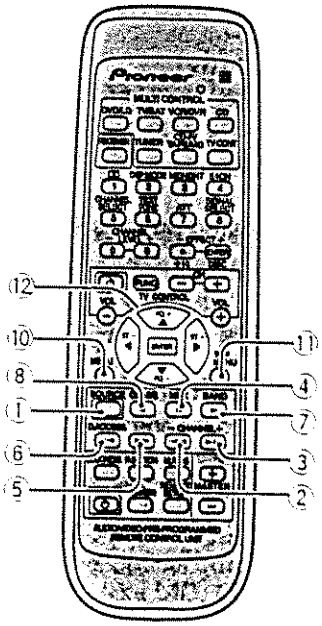
This remote control can control these components after entering the proper codes or teaching the receiver the commands (VSX-D509S/D509S-G only). (see p. 22-25)

Use MULTI CONTROL buttons to put the remote control in the stated mode.

VSX-D509S/D509S-G



VSX-D409/D409-G



① ⏻ SOURCE

Press to switch the cassette deck between STANDBY and ON (not possible on all models).

② ⏮

Use to play the reverse side of the tape on a reversible deck.

③ ⏭

Use to play the forward side of the tape on a reversible deck.

④ ⏸

Press to pause playback or recording.

⑤ ⏩

Press to fast forward the tape. Pressing during playback starts forward search.

⑥ ⏪

Press to rewind the tape. Pressing during playback starts reverse search.

⑦ ▶

Press to start playback.

⑧ ■

Press to stop playback.

⑨ ● RECORD Button (VSX-D509S/D509S-G only)

Use to start recording. To prevent accidental recording, this button must be pressed twice to take effect (the second press must be within 10 seconds of the first).

⑩ MENU (VSX-D409/D409-G only)

Use this button to do a rewind music search.

⑪ TOP MENU (VSX-D409/D409-G only)

Use this button to do a forward music search.

⑫ THESE CONTROLS CAN BE USED FOR DECK ONE OF A DUAL TAPE DECK

▲ :Press to pause the tape.
▼ :Press to stop the tape.
ENTER :Press to start playback
◄ :Press to rewind the tape.
► :Press fast forward the tape

FOR DECK TWO OR ANY DECK THAT CAN RECORD:

▲▼ : pressed together to start recording

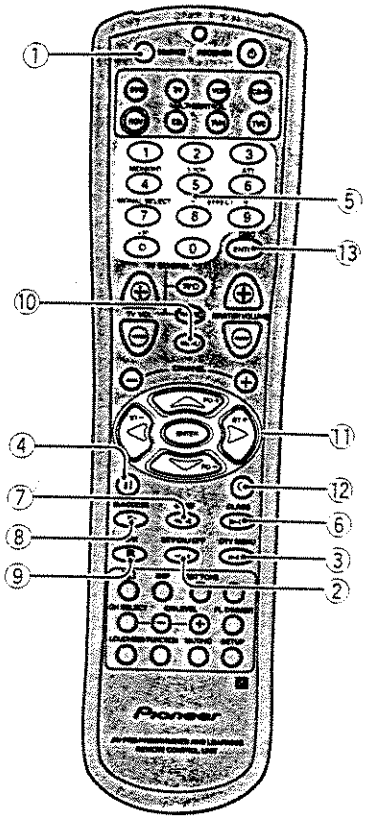
DVD/DVR Player Controls

memo

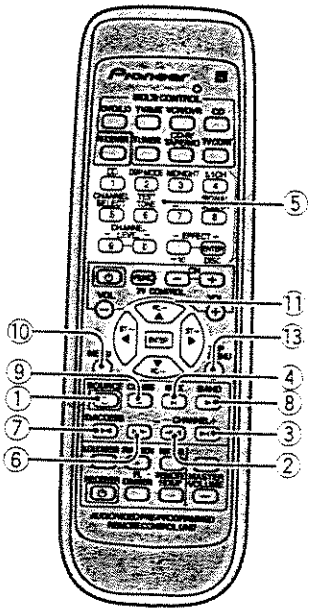
This remote control can control this component after entering the proper codes or teaching the receiver the commands (VSX-D509S/D509S-G only). (see p. 22-25)

Use MULTI CONTROL buttons to put the remote control in the stated mode.

VSX-D509S/D509S-G



VSX-D409/D409-G



① ⏻ SOURCE

Press to switch the DVD/LD player between STANDBY and ON.

② ⏮

Press to return to the start of the current chapter (track). Repeated presses skips to the start of previous tracks. When controlling a DVR, use this button to go back channels (channel –).

③ ⏭

Press to advance to the start of the next chapter (track). Repeated presses skips to the start of following tracks. When controlling a DVR, use this button to go forward channels (channel +).

④ ⏸

Press to pause playback (on some models this will freeze-frame the picture).

⑤ Number buttons

Use the number buttons to navigate the on-screen display.
The **ENTER** button is used as a SETUP button for the DVD players internal menus (VSX-D509S/D509S-G only). The +10 button is used to select tracks higher than 10.

⑥ ⏩

Hold down for fast forward playback.

⑦ ⏪

Hold down for fast reverse playback.

⑧ ▶

Press to start playback (on some models, pressing this when the disc tray is empty will cause the disc tray to open).

⑨ ■

Press to stop playback (on some models, pressing this when the disc is already stopped will cause the disc tray to open).

⑩ MENU

Displays menus concerning the current DVD or DVR you are using.

⑪ USE THESE BUTTONS TO NAVIGATE DVD MENUS

▲ :up
▼ :down
ENTER :enter the command selected
◀ :left
▶ :right

⑫ ● RECORD Button (VSX-D509S/D509S-G only)

Use to start recording. To prevent accidental recording, this button must be pressed twice to take effect (the second press must be within 10 seconds of the first).

⑬ ENTER (VSX-D409/D409-G : TOP MENU)

Use to display the lead trailer on a DVD.

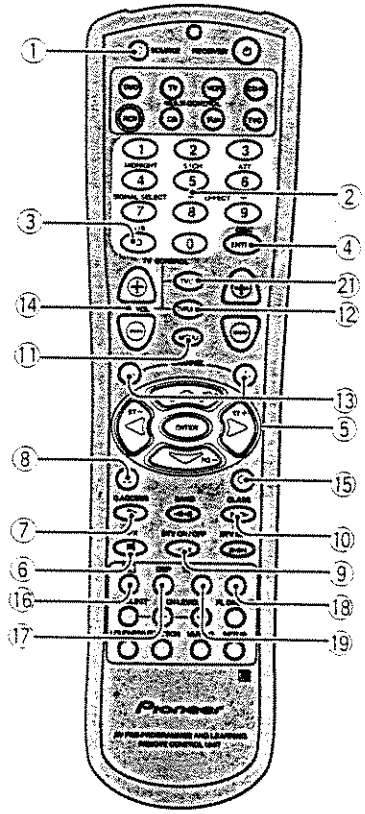
DTV Controls

memo

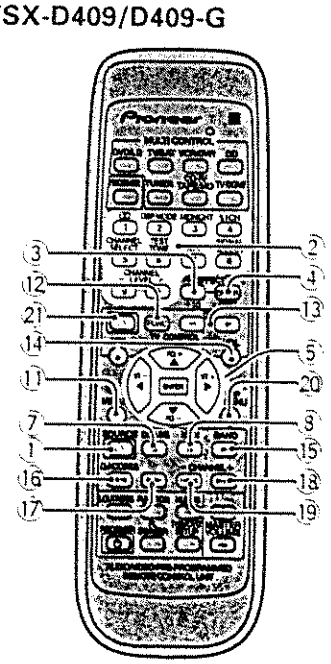
This remote control can control these components after entering the proper codes or teaching the receiver the commands (VSX-D509S/D509S-G only). (see p. 22-25)

Use MULTI CONTROL buttons to put the remote control in the stated mode.

VSX-D509S/D509S-G



VSX-D409/D409-G



① ⏻ **SOURCE (power)**
Press to switch the TV or CATV between **STANDBY** and **ON**.

② **Number buttons**
Use to select a specific TV channel.

③ **● (+10) button**
Use to add a decimal point when selecting a specific TV channel.

④ **ENTER (DISC) button**
Use to enter a channel.

⑤ **▲/▼/◄/►/ENTER**
Press to select or adjust and navigate items on the menu screen.
ENTER : Use to bring up the DTV menus.

⑥ **■ (VSX-D509S/D509S-G only)**
Use to select the desired closed caption.

⑦ **► (VSX-D409/D409-G : ■)**
Use to switch DTV audio tracks.

⑧ **II**
Use as the GUIDE button for navigating.

⑨ **|◄◄ (VSX-D409/D409-G : ⏻ SOURCE)**
Press to switch the DTV on or off.

⑩ **►► (VSX-D509S/D509S-G only)**
Use to set the screen mode.

⑪ **MENU**
Use to select different menus from the DTV functions.

⑫ **TV FUNC (TV only)**
Press to switch the TV input (not possible with some models).

⑬ **CHANNEL +/–**
Use to select channels.

⑭ **TV VOL +/–**
Use to adjust the TV volume.

⑮ **● (VSX-D409/D409-G : ►)**
Use to get INFO on the DTV program.

⑯ **◄ (VSX-D409/D409-G : ◄◄)**
Use to choose the BLUE commands on a DTV menu.

⑰ **DSP (VSX-D409/D409-G : ►►)**
Use to choose the GREEN commands on a DTV menu.

⑱ **BLANK (VSX-D409/D409-G : ►►|)**
Use to choose the YELLOW commands on a DTV menu.

⑲ **TEST TONE (VSX-D409/D409-G : |◄◄)**
Use to choose the RED commands on a DTV menu.

⑳ **TOP MENU (VSX-D409/D409-G only)**
Press to clear the DTV menu.

㉑ **TV ⏻**
Press to switch the DTV on or off.

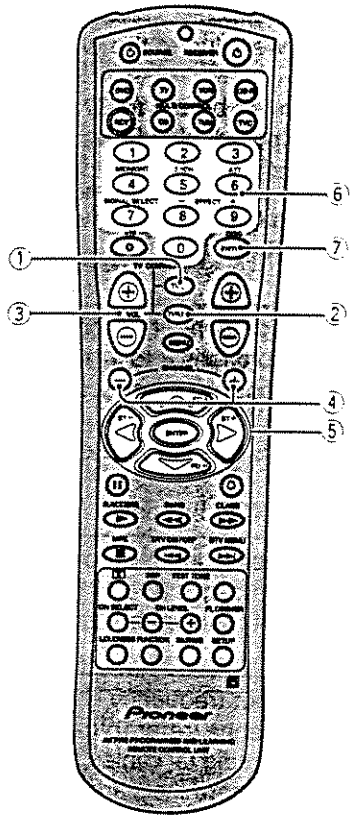
Cable TV/Satellite TV/TV Controls

memo

This remote control can control these components after entering the proper codes or teaching the receiver the commands (VSX-D509S/D509S-G only). (see p. 22-25)

Use MULTI CONTROL buttons to put the remote control in the stated mode.

VSX-D509S/D509S-G



① TV ⏻

Press to switch the TV or CATV between **STANDBY** and **ON**.

② TV FUNC (TV only)

Press to switch the TV input. (Not possible with all models. If it doesn't work with the preset code, use the learning feature — see page 25.)

③ TV VOL +/–

Use to adjust the TV volume.

④ CHANNEL +/–

Use to select channels.

⑤ ▲/▼/◄/►/ENTER

Press to select or adjust and navigate items on the menu screen.

⑥ Number buttons

Use to select a specific TV channel.

⑦ ENTER (DISC) button (VSX-D509S/D509S-G only)

Use to enter a channel.

⑧ ⏮ (VSX-D409/D409-G only)

Use to move to lower numbered channels.

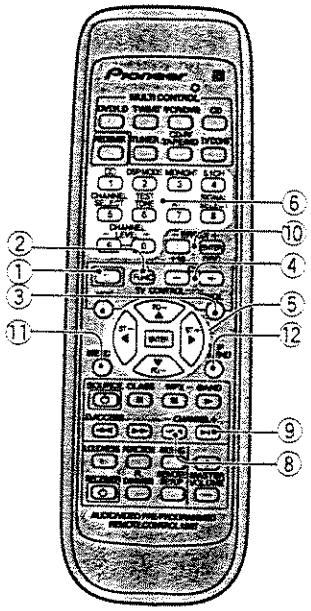
⑨ ⏭ (VSX-D409/D409-G only)

Use to move to higher numbered channels.

⑩ EFFECT +/– (VSX-D409/D409-G only)

For TV and cable TV use this button to immediately enter a new channel (Channel enter function). For satellite TV use this button to exit the menu screen.

VSX-D409/D409-G



⑪ MENU (VSX-D409/D409-G only)

Use to select the menu screen.

⑫ TOP MENU (VSX-D409/D409-G only)

Use to bring up the GUIDE on a satellite TV.

memo

The first four buttons for the VSX-D409/D409-G, and the first three buttons for the VSX-D509S/D509S-G, are dedicated to control the TV assigned to the TVC button. Thus if you only have one TV to hook up to this system assign it to the TVC(TV CONT) MULTI CONTROL button. If you have two TVs, assign the main TV to the TVC(TV CONT) button. If you hook up your system this way, the first four TV controls will always be accessible.

Troubleshooting

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Cause	Remedy
The power does not turn ON.	• The power plug is disconnected. • Main power button is OFF (■). • The protection circuit may have been activated.	• Connect the power plug to the wall outlet. • Set the Main power button to ON (▬). • Disconnect the power plug from the outlet, and insert again.
The unit does not respond when the buttons are pressed.	• Static electricity caused by dry air.	• Disconnect the power plug from the outlet, and insert again.
No sound is output when a function is selected.	• Improper connections. • Sound is muted. • The volume is turned down. • Speakers are turned OFF. • The MONITOR is ON.	• Make sure the component is connected correctly (refer to pages 8 to 14). • Press MUTING on the remote control. • Adjust MASTER VOLUME. • Press SPEAKERS to select the speakers you connected. • Press the MONITOR button.
No image is output when a function is selected.	• Improper connections. • The input source is not properly selected.	• Make sure the component is connected correctly (refer to pages 8 to 14). • Press the correct function button.
Considerable noise in radio broadcasts.	• Incorrect frequency. • The antenna is not connected. • ▯▯ RF and/or digital cables are near the antenna terminals and wires.	• Tune in the correct frequency. • Connect the antenna (refer to page 12). • Route ▯▯ RF and digital cables away from the antenna terminals and wires.
	FM broadcasts	
	• The FM antenna is not fully extended or is poorly positioned. • Weak radio signals.	• Fully extend the FM wire antenna, position for best reception, and secure to a wall. • Connect an outdoor FM antenna (refer to page 12).
	AM broadcasts	
	• The AM antenna is poorly positioned. • Weak radio signals. • Interference cause by other equipment (fluorescent lamp, motor, etc.).	• Adjust the direction and position for best reception. • Connect an additional internal or external AM antenna (refer to page 12). • Turn off the equipment causing the noise or move it away from the receiver. • Place the antenna farther away from the equipment causing the noise.

Symptom	Cause	Remedy
Broadcast stations cannot be selected automatically.	• Weak radio signal.	• Connect an outdoor antenna (refer to page 12).
No sound from surround or center speakers.	• Speaker settings are incorrect. • The rear and/or center levels are turned down. • The surround and/or center speakers are disconnected.	• Refer to "Speakers setting mode" on page 16 to check the speaker settings. • Refer to "Setting the volume level of each channel" on page 21 to check the speaker levels. • Connect the speakers (refer to page 13).
Sound is produced from other components, but not from LD or DVD player.	• SIGNAL SELECT is set incorrectly. • The digital inputs are assigned incorrectly, or not at all.	• Set SIGNAL SELECT to "DIGITAL" or "ANALOG" according to the type of connections made (refer to page 36). • Set the digital input settings correctly (refer to pages 19-20).
No sound is output or a noise is output when software with DTS is played back.	• SIGNAL SELECT is set to "ANALOG". • A DVD player not compatible with DTS is used, or the setting of DVD player is incorrect. • The digital output level is adjusted on a CD player or other component equipped with digital output level adjustment capability. (The DTS signal has been altered by the player, and cannot be read.)	• Make digital connections (refer to page 11) and set SIGNAL SELECT to "DIGITAL" (refer to page 36). • Refer to the instruction manual supplied with the DVD player. • Set the digital volume level of the player to full, or to the neutral position.
When a search is performed by a DTS compatible CD player during playback, noise is output.	• The search function performed by the player slightly alters the digital information, making it unreadable.	• This is not a malfunction, but be sure to turn the volume down to prevent the output of loud noise from your speakers.
Cannot be remote controlled.	• The remote control batteries have worn out. • Too far away or bad angle of operation. • There is an obstacle between the receiver and the remote control. • Strong light such as fluorescent light is shining onto the unit's remote control sensor.	• Replace the batteries (refer to page 6). • Operate within 7 m, 30° of the remote sensor on the front panel (refer to page 6). • Remove the obstacle or operate from another position. • Avoid exposing the remote sensor on the front panel to direct light.
The display is dark or off.	• The FL DIMMER button is pushed.	• Press FL DIMMER on the remote control repeatedly to return to the default.

If the unit does not operate normally due to external effects such as static electricity

Disconnect the power plug from the outlet and insert again to return to normal operating conditions.

Specifications

Amplifier Section

Stereo mode (DIN,1 kHz, 0.9 %, 8 Ω) ..... 80 W + 80 W

Surround mode
VSX-D409/D409-G
Front ..... 80 W per channel (DIN, 1 kHz, 0.9 %, 8 Ω)
Center ..... 80 W (DIN, 1 kHz, 0.9 %, 8 Ω)
Surround .... 80 W per channel (DIN, 1 kHz, 0.9 %, 8 Ω)
VSX-D509S/D509S-G
Front ..... 80 W per channel (DIN, 1 kHz, 0.9 %, 8 Ω)
Center ..... 80 W (DIN, 1 kHz, 0.9 %, 8 Ω)
Surround .... 80 W per channel (DIN, 1 kHz, 0.9 %, 8 Ω)

Maximum Power (1 KHz, 10%, RMS, per channel driven)
..... 100 W x 5

Input (Sensitivity/Impedance)
CD, AUX, VCR/DVR, CD-R/TAPE/MD, DVD/LD, TV/SAT, VIDEO* ..... 200 mV/47 kΩ
Frequency Response
CD, AUX, VCR/DVR, CD-R/TAPE/MD, DVD/LD, TV/SAT, VIDEO* ..... 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB
Output (Level/Impedance)
VCR/DVR REC, CD-R/TAPE/MD REC
..... 200 mV/2.2 kΩ
Tone Control
BASS ..... ± 6 dB (100 Hz)
TREBLE ..... ± 6 dB (10 kHz)
LOUDNESS ..... +9 dB/+9 dB (100 Hz/10 kHz)

Signal-to-Noise Ratio (IHF, short circuited, A network)
CD, AUX, VCR/DVR, CD-R/TAPE/MD, DVD/LD, TV/SAT, VIDEO* ..... 96 dB
Signal-to Noise Ratio [EIA, at 1 W (1 kHz)]
CD, AUX, VCR/DVR, CD-R/TAPE/MD, DVD/LD, TV/SAT, VIDEO* ..... 79 dB

Video Section

Input (Sensitivity/Impedance)
VCR/DVR, DVD/LD, TV/SAT, VIDEO* ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
VCR/DVR ..... 1 Vp-p/75 Ω
Frequency Response
VCR/DVR, DVD/LD, TV/SAT, VIDEO* → MONITOR
..... 5 Hz to 7 MHz $^{+0}_{-3}$ dB
Signal-to-Noise Ratio ..... 55 dB
Cross Talk ..... 55 dB

* *VSX-D509S/D509S-G only*

Published by Pioneer Corporation.
Copyright © 2000 Pioneer Corporation.
All rights reserved.

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or an electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MH
Usable Sensitivity
..... Mono:13.2 dBf, IHF (1.3 µV/ 75 Ω
50 dB Quieting Sensitivity ..... Mono: 20.2 d
Stereo: 38.6 dB
Signal-to-Noise Ratio ..... Mono: 73 dB (at 85 dB
Stereo: 70 dB (at 85 dB
Distortion ..... Stereo: 0.5 % (1 kH
Alternate Channel Selectivity ..... 60 dB (400 kH
Stereo Separation ..... 40 dB (1 kH
Frequency Response ..... 30 Hz to 15 kHz (±1 dB
Antenna Input ..... 75 Ω unbalance

AM Tuner Section

Frequency Range
Multi voltage model
..... 530 kHz to 1,700 kHz(10 kHz step
..... 531 kHz to 1,602 kHz(9 kHz step
Singapore model ..... 531 kHz to 1,602 kH
Sensitivity (IHF, Loop antenna) ..... 350 µV/m
Selectivity ..... 25 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... Loop antenna

Miscellaneous

Power Requirements
Multi voltage model
..... AC 110/120-127/220/240 V (Switchable), 50/60 Hz
Singapore model ..... AC 220-230 V, 50/60 Hz
Power Consumption
Multi voltage model ..... 660 W
Singapore model ..... 220 W
In Standby ..... 1 W
Dimensions
VSX-D409/D409-G
..... 420 (W) x 158 (H) x 391 (D) mm
VSX-D509S/D509S-G
..... 420 (W) x 158 (H) x 401 (D) mm
Weight (without package)
VSX-D409/D409-G ..... 8.4 kg
VSX-D509S/D509S-G ..... 8.4 kg

Furnished Parts

FM wire antenna 1
AM loop antenna 1
Dry cell batteries
Size AA / IEC R6P (VSX-D409/D409-G) 2
Size AA / IEC LR6 (VSX-D509S/D509S-G) 2
Remote Control Unit 1
Operating Instructions 1

NOTE:

Specifications and the design are subject to possible modifications without notice, due to improvements.

Maintenance of External Surfaces

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces.

Preset Code List/預設定代碼目錄 (VSX-D509S/D509S-G)

Device 裝置	Manufacturer 製造廠家	Manufacturer Code 代碼
DVD	Harman/Kardon	0582
	JVC	0558,0623
	Kenwood	0534
	Magnavox	0503
	Mitsubishi	0521
	Onkyo	0503,0627
	Optimus	0525
	Panasonic	0490,0632
	Philips	0503,0539
	Proscan	0522
	RCA	0522
	Samsung	0573
	Sharp	0630
	Sony	0533
	Technics	0490
	Theta Digital	0571
	Toshiba	0503
	Yamaha	0490,0545
	Zenith	0503,0591
	Pioneer	0525,0571,0632 0631(DVD-R/DVD 錄音機)
LD	Akai	0598
	Audio-Technica	0059,0201
	BBK	0624
	Denon	0059
	Disco Vision	0023
	Funai	0584
	Hitachi	0023
	Hong Deng	0542
	Idall	0595
	Kebao	0581
	Mitsubishi	0059
	NAD	0059
	Panasonic	0496
	Philips	0475
	Rowa	0541
	SMC	0596
	Sega	0023
	Sharp	0597
	Shinco	0540
	Sony	0193,0201,0583 0589
	Super	0581
	Toshiba	0599
	Pioneer	0023,0059,0463 0572
TV	AOC	0019,0030
	Admiral	0093,0463
	Aiko	0092
	Akai	0030
	Alaron	0179
	Allegro	0720,0774
	Ambassador	0177
	Ameroca Action	0180
	Ampro	0751
TV	Amstrad	0412
	Anam National	0161,0250,0425
	Anam	0004,0009,0068 0161,0180,1250 0425
	Audio-Technica	0000,0036,0053 0093,0145,0150 0156,0160,0161 0166,0170
	Audiovox	0092,0180,0451 0623
	Aumrk	0060
	Baur	0010,0512
	Baysonic	0180
	Belcor	0019
	Bell & Howell	0016,0154
	Bradford	0180
	Brackwood	0019
	Broksonic	0236,0463
	CCE	0037
	CXC	0180
	Candle	0030,0056
	Carnivale	0030
	Carver	0054,0170
	Celebrity	0000
	CME	0010,0035,0512
	Cineral	0092,0451
	Citzen	0030,0039,0056 0060,0092
	Concerto	0056
	Contec	0180
	Craig	0161,0180
	Crosley	0054
	Crown	0039,0180,0418
	Curtis Mathes	0016,0030,0039 0047,0051,0054 0056,0060,0093 0145,0154,0166 0451,0466,1147 1347
	Daewoo	0019,0039,0066 0092,0154,0451 0623,0624
	Daytron	0019,0039
	Denon	0145
	Dumont	0017,0019
	Dwin	0720,0774
	ECE	0037
	Electroband	0000
	Emerson	0019,0038,0039 0154,0177,0178 0179,0180,0236 0282,0463,0623 0624
	Envision	0030
TV	Etron	0009,0646
	Fisher	0154
	Fortress	0093
	Fujitsu	0179
	Futuretech	0180
	Funai	0171,0179,0180 0264
	GE	0021,0047,0051 0093,0178,0282 0451,1147,1347
	Gibralter	0017,0019,0030
	GoldStar	0001,0002,0019 0030,0037,0039 0056,0178
	Gradiente	0053,0056,0170
	Granada	0037
	Grundig	0037
	Grunpy	0179,0180
	Hallmark	0178
	Harley Davidson	0179
	Harman/Kardon	0054
	Harvard	0068,0180
	HCM	0412
	Hitachi	0038,0056,0145
	Imperial	0418
	Infinity	0054
	Innova	0037
	Interfunk	0512
	Inteq	0017
	JBL	0054
	JCB	0000
	JVC	0036,0053,0069 0094,0160
	KEC	0180
	Konig	0512
	KTV	0030,0039,0180
	Kenwood	0019,0030
	LG	0056
	Loewe	0512
	LXI	0047,0054,0154 0156,0178
	Logik	0016
	Luxman	0056
	Matsui	0035
	MGA	0019,0030,0150 0178
	MTC	0019,0030,0056 0060,0512
	Magnavox	0030,0036,0054 0179
	Majestic	0016
	Marantz	0030,0037,0054
	Matsushita	0250
	Megatron	0145,0178
	Minutz	0021

Preset Code List/預設定代碼目錄

Device 裝置	Manufacturer 製造廠家	Manufacturer Code 代碼
TV	Memorex	0016,0056,0060 0150,0154,0178 0250,0463
	Midland	0017,0039,0047 0051
	Mitsubishi	0019,0093,0150 0178,0108,0512
	Motorola	0093
	Multitech	0180
	NAD	0156,0166,0178
	NTC	0092
	NEC	0019,0030,0036 0056,0170
	Netsat	0037
	Nikkai	0035
	Nikko	0030,0092,0178
	Onwa	0180
	Optimus	0154,0166,0250
	Optonica	0093,0165
	Orion	0179,0236,0463
	Osaki	0412
	Otto	0010,0512
	Palladium	0418
	Panasonic	0051,0161,0250 0680
	Penny	0002,0019,0021 0030,0039,0047 0051,0056,0060 0156,0178,1347
	Philco	0019,0030,0054 0145,0463
	Philips	0037,0054
	Pilot	0019,0030,0039
	Portland	0019,0039,0092
	Prism	0051
	Proscan	0047
	Protech	0418
	Proton	0178,0466
	Pulsar	0017,0019
	Quasar	0051,0165,0250
	Quelle	0010,0512
	RCA	0019,0038,0047 0051,0090,0093 1047,1147,1247 1347,1447
	Radio Shack	0019,0030,0039 0047,0056,0154 0165,0178,0180
	Real istic	0019,0030,0039 0056,0154,0165 0178,0180
	Roadstar	0418
	Runco	0017,0030,0603
	SSS	0019,0180
	Samsung	0019,0030,0037 0056,0060,0090 0178

Device 裝置	Manufacturer 製造廠家	Manufacturer Code 代碼
TV	Sampo	0030,0039
	Samsux	0039
	Sansei	0451
	Sansui	0463
	Sanyo	0154,0208,0339
	Scimitsu	0019
	Scotch	0178
	Scott	0019,0178,0179 0180,0236
	Sei-Sinudyne	0010
	Semivox	0180
	Semp	0156
	Sears	0047,0054,0056 0154,0156,0171 0178,0179
	Sharp	0039,0093,0165
	Shogun	0019
	Signature	0016
	Sky	0037
	Sky-Worth	0037
	Sony	0000,0010
	Soundesign	0178,0179,0180
	Soundwave	0418
	Squareview	0171
	Starlite	0180
	Supreme	0000
	Sylvania	0030,0054
	Symphonic	0171
	TMK	0056,0177,0178
	Tandy	0093
	Technics	0051,0250
	Technal Ace	0179
	Techwood	0051,0056
	Teknika	0016,0019,0039 0054,0056,0060 0092,0150,0179 0180
	Telefunken	0056
	Toshiba	0035,0036,0060 0154,0156
	Totevision	0039
	Vector Research	0030
	Victor	0036,0053,0160 0250
	Vidikron	0054
	Vidtech	0019,0036,0178
	Wards	0016,0019,0021 0030,0054,0056 0165,0178,0179
	White Westinghouse	0463,0623,0624
	Yamaha	0019,0030
	Zenith	0016,0017,0092 0463
	Pioneer	0038,0166,0172 0679 (DTV),0680 0166

Device 裝置	Manufacturer 製造廠家	Manufacturer Code 代碼
CATV	ABC	1003,1008,1011 1014
	Bell & Howell	1014
	Contec	1019
	Daehan	1778
	Daeryung	1008
	Everquest	1015
	Gemini	1015
	GoldStar	1144,1838
	General Instrument	1011,1276,1476 1810
	Hitachi	1011
	Jasco	1015
	Jerrold	1003,1011,1012 1014,1015,1276 1476,1810
	LG Alps	1779
	Memorex	1000
	Now	1776
	Oak	1019
	Pacific	1678
	Panasonic	1000,1107
	Paragon	1000
	Pulsar	1000
	Quasar	1000
	Radio Shack	1015
	Rembrandt	1011
	Runco	1000
	Samsung	1144,1702
	Scientific Atlanta	1008,1477,1877
	Seawoo	1780
	Signal	1015
	Signature	1011
	Starcom	1003,1015
	Stargate	1015
	Starquest	1015
	Taihan	1778
	Tocom	1012
	Tongkook	1777,1840
	Toshiba	1000
	Tusa	1015
	Zenith	1000,1525
	Pioneer	1023,1144,1260 1533,1679(DTV),1680 (Set Top Box/設置機頂盒)
SAT	AlphaStar	1772
	Chaparral	1216
	Dae Young	1735
	Daeryung	1396
	Echostar	1396,1775
	Expressvu	1775
	General Instrument	1361,1627,1869
	HTS	1775
	Hitachi	1489,0819
	Hughes Network Systems	1749

Device 裝置	Manufacturer 製造廠家	Manufacturer Code 代碼
SAT	Hung Chang	1732
	JVC	1492,1505,1506 1775
	Jerrold	1361,1627
	JiWon	1364
	Kabil	1737
	Magnavox	1722,1724
	Marantz	1200
	Memorex	1724
	Mitsubishi	1491
	NEC	1496,1499,1507 1508
	Next Level	1869
	Panasonic	1340,1500,1701
	Philips	1200,1722,1724
	Primestar	1361,1627
	RCA	1143,1392,1566 1855
	Radio Shack	1869
	Sanyo	1493
	Sharp	1494
	Sony	1275,1639,1661
	Star Choice	1869
	Tae Kwang	1733
	Toshiba	1486,1790
	Uniden	1722,1724
	VTech	1321
	Victor	1492,1505,1506
	Zenith	1856
	Pioneer	1662,1329
CD	Aiwa	0124,0157
	Anam	0362
	Burmester	0420
	California Audio Labs	0029
	Carver	0157,0179,0437
	Curtis Mathes	0029
	DKK	0000
	Denon	0003,0358,0873
	Dynamic Bass	0179
	Emerson	0305
	Eroica	0562,0563
	Fantasia	0525
	Fisher	0174,0179
	Garrard	0393,0420
	Genexxa	0032,0305
	GoldStar	0383,0525
	Harman/Kardon	0157,0173
	Hitachi	0032
	Inkel	0114,0180,0437
	JVC	0072
	Kenwood	0028,0037,0190 0681,0826
	Krell	0157
	LXI	0305
	Linn	0157
	Luxman	0266

Device 裝置	Manufacturer 製造廠家	Manufacturer Code 代碼
CD	MCS	0029
	MTC	0420
	Magnavox	0157,0305
	Marantz	0029,0157,0180
	Mission	0157
	NSM	0157
	Nikko	0174,0362,0525
	Onkyo	0101,0381,0868
	Optimus	0000,0032,0037 0145,0179,0305 0420,0437,0468
	Panasonic	0029,0303
	Parasound	0420
	Philips	0157,0626
	Proton	0157
	QED	0157
	Quasar	0029
	RCA	0053,0179,0305
	Realistic	0179,0180,0420
	Rotel	0157,0420
	SAE	0157
	Sansui	0157,0305
	Sanyo	0179,0349
	Scott	0305
	Sears	0305
	Sharp	0037,0180,0861
	Sherwood	0114,0180
	Sony	0000,0185,0490
	Soundesign	0145
	Tascam	0420
	Teac	0174,0180,0393 0420
	Technics	0029,0303
	Toshiba	0481
	Victor	0072
	Wards	0053,0157
	Yamaha	0036,0187
	Yorx	0461
	Pioneer	0032,0244,0305 0468,0551 1062 (CD-R/CD 錄音機)
TAPE	ADC	1171
	Aiwa	1029,1197,1223
	Akai	1189
	Anam	1364
	Carver	1029,1261
	Denon	1076
	Dual	1383
	Dynamic Bass	1261
	Eroica	1418
	Fisher	1261
	Garrard	1375
	GoldStar	1375
	Harman/Kardon	1029,1182
	Inkel	1070
	JVC	1244,1273
	Kenwood	1070

Device 裝置	Manufacturer 製造廠家	Manufacturer Code 代碼
TAPE	Kyocera	1171
	Lotte	1339
	Luxman	1266
	Magnavox	1029
	Marantz	1029
	Nakamichi	1218
	Nikko	1364
	Olympus	1266
	Onkyo	1135,1282
	Optimus	1027,1220
	Panasonic	1229
	Philips	1029
	RCA	1261
	Renaissance	1413
	Samsung	1391
	Sansui	1029
	Sanyo	1261
	Sonic	1375
	Sony	1170,1243,1291
	Teac	1391
	Technics	1229
	Victor	1244,1273
	Wards	1027
	Yamaha	1094,1097
	Pioneer	1027,1099,1101 1220
TUNER	Pioneer	0080
VCR	Admiral	0048,0209
	Adventura	0000
	Aiko	0278
	Aiwa	0000,0037,0307
	Akai	0041,0106,0281 0315
	America Action	0278
	American High	0035
	Anam	0037,0162,0226 0240,0278,0553 0579
	Anam National	0162,0226,1162
	Asha	0240
	Audiovox	0037
	Beaumark	0240
	Bell & Howell	0104
	Blaupunkt	0226
	Broksonic	0002,0121,0184 0209,0479
	CCE	0072,0278
	Calix	0037
	Canon	0035
	Capehart	0020
	Carver	0081
	Cineral	0278
	Citizen	0037,0278
	Craig	0037,0047,0072 0240,0271
	Curtis Mathes	0035,0041,0060 0162

Preset Code List/預設定代碼目錄

Device 裝置	Manufacturer 製造廠家	Manufacturer Code 代碼
VCR	Colt	0072
	Cybernex	0240
	Daewoo	0020,0045,0046 0278,0561
	Daytron	0020
	Denon	0042
	Dynatech	0000
	Electrohome	0037
	Electrophonic	0037
	Emerex	0032
	Emerson	0000,0002,0037 0043,0121,0184 0208,0209,0278 0479,0561
	Fisher	0047,0104
	Fuji	0035
	Funai	0000
	GE	0035,0048,0060 0240
	Garrard	0000
	General	0052
	Go Video	0432,0526
	GoldStar	0037,0038,0225 0480
	Gradiente	0000,0008
	HI-Q	0047
	Harley Davidson	0000
	Harman/Kardon	0038,0081
	Harwood	0072
	Headquarter	0046
	Hitachi	0000,0041,0042 0166,0235
	Hughes Network Systems	0042
	JVC	0008,0041,0067
	Jensen	0041
	KEC	0037,0278
	KLH	0072
	Kenwood	0038,0041,0067
	Kodak	0035,0037
	LG	0480
	LXI	0037
	Lloyd's	0000,0208
	Logik	0072
	MEI	0035
	MGA	0043,0240
	MGN Technology	0240
	MTC	0000,0240
	Magnasonic	0278
	Magnavox	0000,0035,0039 0081
	Magnin	0240
	Marantz	0035,0081
	Marta	0037
	Matsushita	0035,0162,0227
	Mitsubishi	0043,0048,0067 0173
VCR	Memorex	0000,0035,0037 0039,0046,0047 0048,0104,0209 0240,0307,1037 1162,1262
	Minolta	0042
	Motorola	0035,0048
	Multitech	0000,0072
	NAD	0058
	NEC	0038,0040,0041 0067,0104
	National	0226
	Nikko	0037
	Nikon	0034
	Noblex	0240
	Olympus	0035,0226
	Optimus	0037,0048,0058 0104,0162,0432 1048,1062,1162 1262
	Orion	0002,0184,0209 0479
	Panasonic	0035,0162,0225 0226,0227,1162
	Penney	0035,0037,0038 0040,0042,0240
	Pentax	0042
	Philco	0035,0209,0479
	Philips	0035,0081
	Pilot	0037
	Portland	0020
	Profitronic	0240
	Proscan	0060
	Protec	0072
	Pulsar	0039
	Quarter	0046
	Quartz	0046
	Quasar	0035,0162,1162
	RCA	0035,0042,0048 0060,0106,0240
	Radio Shack	0000,1037
	Radix	0037
	Randex	0037
	Realistic	0000,0035,0037 0046,0047,0048 0104
	Ricoh	0034
	Runco	0039
	STS	0042
	Samsung	0045,0240,0426 0432
	Sanky	0039,0048
	Sansui	0000,0041,0067 0209,0271,0479
	Sanyo	0046,0047,0104 0240
	Scott	0043,0045,0121 0184
VCR	Sears	0000,0035,0037 0042,0046,0047 0104
	Semp	0045
	Sharp	0048,0363
	Shintom	0072
	Shogun	0240
	Singer	0072
	Sony	0000,0032,0034 0035
	Sylvania	0000,0035,0043 0081
	Symphonic	0000
	TMK	0208,0240
	Tatung	0041
	Teac	0000,0041
	Technics	0035,0162
	Teknika	0000,0035,0037 0052
	Thomas	0000
	Toshiba	0043,0045
	Totevision	0037,0240
	Unitech	0240
	Vector	0045
	Vector Research	0038,0040
	Victor	0008,0041,0067
	Video Concepts	0040,0045
	Videosonic	0240
	Wards	0000,0035,0042 0047,0048,0060 0072,0081,0240
	White Westinghouse	0209,0278
	XR-1000	0000,0035,0072
	Yamaha	0038
	Zenith	0000,0034,0039 0209,0479
	Pioneer	0058,0067,0168
MD	Sony	0490
	Denon	0873
	Kenwood	0681,0826
	Onkyo	0868
	Sharp	0861
	Pioneer	1063

Preset Code List/預設定代碼目錄 (VSX-D409/D409-G)

Device 裝置	Manufacturer 製造廠家	Manufacturer Code 代碼
DVD	TOSHIBA	001
	SONY	002
	PANASONIC	003
	JVC	004
	SAMSUNG	005
	SHARP	006
	AKAI	007
	RCA	009
	PIONEER	000, 003, 111
LD	SONY	101
	PANASONIC	105, 106
	KENWOOD	103
	PHILIPS	104
	RCA	107
	MITSUBISHI	100
	PIONEER	100, 111
TV	RCA	601, 615, 616, 617 610, 623, 621, 602, 618
	ZENITH	603, 620
	MAGNAVOX	612, 629, 607, 610, 603
	GE	611, 628, 601, 608, 607, 610, 617, 602, 618
	PANASONIC	608, 622, 607
	SONY	604
	TOSHIBA	605, 626, 602, 621
	MITSUBISHI	609, 610, 602, 621
	HITACHI	606, 624, 625, 610, 618
	JVC	613, 623
	SHARP	602, 619, 627
	SANYO	614, 621
	PHILIPS	607
	GOLDSTAR	610, 623, 621, 602
	GRADIENT	630
	RADIO SHACK	610, 623, 621, 602
	PIONEER	600
CATV	JERROLD	701, 702,703, 704, 711, 712, 713, 714, 715, 716
	SA	705, 706, 708, 709
	ZENITH	707, 710, 717
	PIONEER	700
SAT	RCA	201, 203
	SONY	202
	ECHOSTAR	205
	PIONEER	200
DTV	PANASONIC	227
	PIONEER	207, 226
DVR	PIONEER	456
CD	SONY	301, 316, 317, 318
	TECHNICS	304, 326
	KENWOOD	310, 311, 321

Device 裝置	Manufacturer 製造廠家	Manufacturer Code 代碼
CD	DENON	309
	RCA	302, 319, 300, 313
	PHILIPS	312, 322
	YAMAHA	314, 315, 328
	JVC	303
	TEAC	305, 306, 324, 325, 327
	ONKYO	307, 308, 320
	MARANTZ	323, 312, 324
	SANYO	313
	OPTIMUS	300
	PIONEER	300
CD-R	PHILIPS	346
	PIONEER	345
TAPE	SONY	801, 806
	TECHNICS	803
	KENWOOD	804, 807
	TEAC	805
	DENON	810
	ONKYO	808, 809
	YAMAHA	811, 812
	JVC	802
	FISHER	813
	RCA	800
	OPTIMUS	800
	PIONEER	800
MD	SONY	901
	KENWOOD	903
	SHARP	902
	TEAC	904
	ONKYO	905
	DENON	906
	PIONEER	900, 907(FOR DAT/針對 DAT), 902
VCR	RCA	401, 413, 415, 406, 408, 414, 405, 411, 432, 433, 402, 418, 419
	ZENITH	403, 404, 417
	MAGNAVOX	414, 408, 426, 403
	FISHER	412, 426, 427, 410, 425, 420
	PANASONIC	408, 432, 433
	TOSHIBA	405, 409, 426
	JVC	407, 428, 429, 430, 431, 408, 414
	HITACHI	406, 434, 436, 408, 401
	SONY	404, 416, 417, 457, 458, 459, 408
	MITSUBISHI	409, 420, 421, 422, 423, 424, 408, 407
	SANYO	410, 425, 435, 412
	SHARP	402,418,419
	GOLDSTAR	411, 409
	GRANDIENTE	441
	OPTIMUS	408, 432, 433, 402, 418, 419
	PIONEER	400